Fall 2014 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including DWR Erosion Survey

San Joaquin River Basin

RD0524	Overall LMA	Total LMA							
Reclamation District No. 0524 Middle	Rating	Miles							
Roberts Island	U	6.20							
Rated Item		Maintena	nce Deficiancy		Enforc	Enforcement		Design & System Obsolescence	
Nateu item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles	
Earthen Levee									
Vegetation	0.19	0.10	0.59	9.52%	0.07	0.02			
Trim / Thin Trees	0.79	0.19	1.55	25.01%	0.01				
Encroachments	0.14	0.03	0.26	4.20%	0.25	0.08			
Animal Control	0.34		0.34	5.49%					
Slope Stability	0.22	0.01	0.26	4.20%					
Erosion / Bank Caving	0.11	0.01	0.15	2.42%					
Crown Surface / Depressions / Rutting	0.05		0.05	0.81%					
Operations & Maintenance Manuals		0.25	0.99	15.97%					
Emergency Supplies & Equipment	0.06		0.06	0.97%					
Flood Preparedness & Training	0.06		0.06	0.97%					
Supplemental			1	-					
DWR Erosion Survey	0.03	0.41	1.67	26.95%					
DWR UCIP Field Study					0.33	0.02			
LMA Totals:	1.99	1.00	5.99	96.65%	0.66	0.12	0.00	0.00	

LMA District Cover Sheet

Fall 2014 Levee Inspection Results

Reclamation District No. 0524 Middle Roberts Island

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)					
* Overall LMA Rating (Fall Only)			U						
	** Non-receipt of Su	ımmer or Winter Inspe	ection Reports may effect	ct overall annual rating.					
* <u>SPRING INSPECTIONS:</u> Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.									
FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indiction of risk.									
Comments									

Unit Cover Sheet

Fall 2014 Levee Inspection Results

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles
Unit No. 01 San Joaquin River	Left	6.20

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			U	
Date of Inspection	04/08/2014 - 04/08/2014		10/20/2014 - 10/20/2014	
DWR Inspector	Richard Willoughby		Richard Willoughby	
Accompanied By	Mario Jaques RD 524		Mario Jaques RD 524	

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	0.00	Rating **	U	Issue No.		121			
LM End	0.00	Issue Type +	Ma	Location *		N/A			
Category	Catagoni Earthen Levee				GPS Latitude/Longitude				
Category		Start		End					
Item	Operations & Maintenance				0		0		
пеш	Manuals				0		0		
DWR ID	DWR ID DWR_RD0524_01_s _ 2012_121								
	Action/Comments								
Inspector (Inspector Comments: The LMA did not appear to have a copy of the								

No Photos

Rating ** Issue No. LM Start 0.00 M 123 N/A 0.00 Issue Type + Ma Location * LM End Earthen Levee GPS Latitude/Longitude Category End Start Flood Preparedness & Training Item DWR RD0524 01 s 2012 123 DWR ID Action/Comments Inspector Comments: No recent training.

No Photos

Rating ** Issue No. LM Start 0.00 Μ 138 LM End 0.00 Issue Type + Ma Location * N/A Earthen Levee GPS Latitude/Longitude Category Start End Emergency Supplies & Item Equipment DWR ID DWR_RD0524_01_s _ 2013_138 Action/Comments

Inspector Comments: The LMA did not appear to have emergency

No Photos

supplies or equipment.

O&M Manual.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side

** Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma: Maintenance Deficiancy

Ob: Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	0.18	Rating **	U	Issue No.		129	
LM End	0.18	Issue Type +	Ма	Location *		WS	
Category				GPS Latitude/Longitude			
Calegory	egory					End	
Item	DWR Erosion Survey			37.9390	85 °	37.939085 °	
пеш		-121.3439	17 °	-121.343917 °			
DWR ID							
Action/Comments							

Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: The erosion was discovered during 2013 spring levee inspection. Inspector comment: Erosion is located along the lower level of water-ward slope. [2014 Site ID:RD0524U01RM40.85]



Close view of the erosion.

LM Start	0.22 Rating ** M		Issue No.		3		
LM End	0.22	Issue Type +	Ма	Location *		CR	
Category	Earthen Levee			GPS Latitude/Longitude			
Category			Start		End		
Item		Crown Surface / Depressions /			90 °	37.938890	•
item	Rutting			-121.3436	57 °	-121.343657	0
DWR ID DWR_RD0524_01_s _ 2012_3							
Action/Comments							

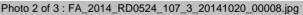
LM Start	0.22	Rating **	M	Issue No.		3		
LM End	0.22	Issue Type +	Ma	Location *		CR		
Category Earthen Levee			GPS Latitude/Longitude					
Calegory		Start		End				
Item	Crown Surface / Depressions /			37.938890 °		37.938890	0	
пеш	Rutting	-121.343657 °		-121.343657	0			
DWR ID	DWR_RD0	524_01_s _ 201	12_3					
Action/Comments								
Repair depressions or ruts in the crown or slope. Inspector Comments: No change in status.								

F11010 1 01 3 . FA_20	14_000524_107_	_3_20141020_00007.jpg



Looking west at 3" depression on levee crown. (Spring 2012)

Rating ** 0.22 Issue No. LM Start 3 (cont) Issue Type + Location ' CR LM End 0.22





Looking west at depression on levee crown near waterward shoulder.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	0.22	Rating **	М	Issue No.	3 (cont)			
LM End	0.22	Issue Type +	Ma	Location *	CR			
Category Earthen Levee				GPS Latitude/Longitude				
Category			Start		End			
Item		rface / Depres	ssions /	37.9388	90 °	37.938890 °		
пеш	Rutting -121.343657 ° -121.343657							
DWR ID DWR_RD0524_01_s _ 2012_3								
	Action/Comments							

Repair depressions or ruts in the crown or slope. Inspector Comments: No change in status.

Photo 3 of 3: FA_2014_RD0524_107_3_20141020_00009.jpg



Looking east at 3" depression on levee crown. (Spring 2012)

LM Start	0.27	Rating **	М	Issue No.	179		
LM End	0.27	Issue Type +	Ma	Location *	WS		
Earthen Levee			GPS La	atitud	e/Longitude		
Calegory	Category			Start		End	
ltom	Trim / Thi	n Trees		37.9384	38 °	37.938438	0
Item				-121.3428	83 °	-121.342883	0
DWR ID DWR_RD0524_01_s _ 2014_179							
		Action/	Comme	nts			

Thin trees to allow visibility of the ground and room to flood fight.

Photo 1 of 1 : FA_2014_RD0524_107_179_20141023_00189.jpg



Looking south at untrimmed tree on waterward slope.

LM Start	0.30	Rating **	М	Issue No.		174	
LM End	0.30	Issue Type +	Ma	Location *		WS	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End	
Item	Animal Control			37.93838	32 °	37.938382	0
iteiii		-121.34235	52 °	-121.342352	0		
DWR ID	DWR_RD0	524_01_f _ 201	4_174				

Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comments: Several rodent borrow present at this site.



Looking southeast at several rodent holes on waterward slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	0.34	Rating **	М	Issue No.		180		
LM End	0.34	Issue Type +	Ma	Location * WS		WS		
Category Earthen Levee				GPS Latitude/Longitude				
Calegory	ory			Start		End		
Item	Erosion / Bank Caving			37.9384	61 °	37.938461	0	
item			-121.3416	26 °	-121.341626	0		
DWR ID DWR_RD0524_01_s _ 2014_180								

Action/Comments

Schedule repair of erosion site prior to the next inspection. Inspector Comments: Erosion is located along the lower level of waterward slope.

LM Start	0.34	Rating **	М	Issue No.	180 (cont)
LM End	0.34	Issue Type +	Ma	Location *	WS

Photo 1 of 2 : FA_2014_RD0524_107_180_20141020_00135.jpg



Looking southeast at erosion on waterward toe.

Photo 2 of 2: FA_2014_RD0524_107_180_20141020_00136.jpg



Looking northeast at erosion on waterward toe.

LM Start	0.40	Rating **	U	Issue No.		131
LM End	0.40	Issue Type +	Ma	Location * WS		WS
Catagori Supplemental			GPS Latitude/Longitude			
Category	Category			Start		End
Item	DWR Erosion Survey			37.93887	0 °	37.938870 °
item			-121.34046	0 °	-121.340460 °	
DWR ID						·

Action/Comments

Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: No significant change at this site.

8/7/2012: The erosion is at the upper levee slope, and likely caused by slope slip. The lower levee slope is covered with dense vegetation. [2014 Site ID:RD0524U01RM40.99]

Photo i	of 1 : SJR2014_RD0524L	JOTKM40.99_1.Jpg
		Ţ
.		

Front view of the erosion site. Note the vegetation at the levee toe and lower slope.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy

M: Minimally Acceptable C: C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating

A: Acceptable M: N: Not Inspected/Rated Ma: Maintenance Deficiancy Ob: Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

0.63	Rating **	М	Issue No.		11		
0.63	Issue Type +	Ma	Location *	WS			
Category Earthen Levee			GPS La	titud	le/Longitude		
			Start		End		
Vegetation			37.9382	78 °	37.938247 °		
			-121.33652	24 °	-121.336503 °		
DWR ID DWR_RD0524_01_s _ 2012_11							
	0.63 Earthen L Vegetatio	0.63 Issue Type + Earthen Levee Vegetation	0.63 Issue Type + Ma Earthen Levee Vegetation	0.63 Issue Type + Ma Location * Earthen Levee GPS La Start Start Vegetation 37.9382 -121.3365;	0.63 Issue Type + Ma Location * Earthen Levee GPS Latitud Start Vegetation 37.938278 ° -121.336524 °		

Action/Comments

Remove the wild growth other than native grasses from the levee slopes.

Inspector Comments: Bamboo on waterward slope.

LM Start	0.63	Rating **	М	Issue No.	11 (cont)
LM End	0.63	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : FA_2014_RD0524_107_11_20141020_00014.jpg



Looking southeast at bamboo on waterside slope. (Spring 2012)

Photo 2 of 3: FA_2014_RD0524_107_11_20141020_00015.jpg



Looking south at dying bamboo on waterward slope. (Spring 2013) Photo 3 of 3: FA_2014_RD0524_107_11_20141020_00016.jpg

LM Start	0.63	Rating **	М	Issue No.	11 (cont)
LM End	0.63	Issue Type +	Ма	Location *	WS



Looking south at bamboo on waterside slope. (Fall Inspection 2012)

* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

** Rating

A : Acceptable N : Not Inspected/Rated M : Maintenance Deficiancy

M : Minimally Acceptable CR : Corrected Ob : Design & System Obsolescence

U : Unacceptable A/W : Acceptable but Monitor & Maintain En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	0.63 Rating ** M			Issue No.		10	
LM End	0.63	Issue Type +	Ma	Location *	WS		
Cotogony	evee	GPS Latitude/Longitude					
Category			Start		End		
Item	Slope Stability			37.9382	47 °	37.938247	0
item			-121.3365	03 °	-121.336503	0	
DWR ID DWR_RD0524_01_s _ 2012_10							
Action/Comments							

Repair the levee slope damaged by foot traffic and prevent access where possible.



Looking east at waterside erosion appears to be caused by runoff.

LM Start	0.65	Rating **	М	Issue No.		13	
LM End	0.66	Issue Type +	Ma	Location *	WS		
Category	evee	GPS Latitude/Longitude					
Category				Start		End	
Item	Slope Stability			37.9381	05 °	37.938023 °	
пеш		-121.3362	88 °	-121.336173 °			
DWR ID DWR_RD0524_01_s _ 2012_13							
Action/Comments							

Repair slope instability.

Inspector Comments: Erosion extends from mid levee slope to shoulder.

Photo 1 of 3: FA_2014_RD0524_107_13_20141020_00018.jpg

Erosion from LM 0.65 to 0.66

LM Start	0.65	Rating **	М	Issue No.	13 (cont)
LM End	0.66	Issue Type +	Ma	Location *	WS



Looking south at erosion on waterside shoulder.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy

M: Minimally Acceptable C: C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating

A: Acceptable M: N: Not Inspected/Rated Ma: Maintenance Deficiancy Ob: Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	0.65	Issue No.		13 (cont)			
LM End	0.66	Issue Type +	Ma	Location *	* WS		
Category	evee	GPS Latitude/Longitude					
Calegory				Start		End	
Item	Slope Stability			37.9381	05 °	37.938023	0
пеш				-121.3362	88 °	-121.336173	0
DWR ID DWR_RD0524_01_s _ 2012_13							
Action/Comments							

Repair slope instability.

Inspector Comments: Erosion extends from mid levee slope to shoulder.



Update of erosion site at LM 0.65 to 0.66

LM Start	0.67	Rating **	М	Issue No.		15
LM End	0.67	Issue Type +	En	Location *		WS
Category	Supplemental			GPS Latitude/Longitude		
Category				Start E		End
Item	DWR UCIP Field Study			37.9378	91 °	37.937891 °
пеш				-121.3359	39°	-121.335939 °
DWR ID	DWR_RD0	524_01_f _ 201	4_15			

Action/Comments

Inspector Comments: FS_ID:17563 EP_NO: 6035

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Flows from primer tank causing erosion on LS slope. FIELD_STRUCT_DESC: 48-inch pipe through levee 7.3 feet below crown. Siphon pumps and primer tank enclosed by cyclone fence on the landward shoulder. Gate valve at inlet sump 100-feet off LS toe.

One concrete cutoff wall. (Permit No. 6035, 1968).

FS Date: 8/16/2013

No Photos

LM Start	0.68	М	Issue No.		14		
LM End	0.68	Issue Type +	Ma	Location *		WS	
Category	evee	GPS Latitude/Longitude					
Category				Start		End	
Item	Vegetation			37.93780	08 °	37.937808 °	
пеш				-121.3359 ²	13 °	-121.335913 °	
DWR ID DWR_RD0524_01_s _ 2012_14							
Action/Comments							

Remove the wild growth other than native grasses from the levee

Inspector Comments: Bamboo on waterward slope.



Looking southeast at bamboo on waterside shoulder as of 4/2010.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	0.68	Rating **	М	Issue No.		Issue No.		Issue No.		14 (cont)	
LM End	0.68	Issue Type + Ma		Location *		WS					
Earthen Levee				GPS La	tituc	le/Longitude					
Category				Start		End					
Item	Vegetatio	n		37.93780	08°	37.937808	0				
пеш				-121.3359°	13 °	-121.335913	0				
DWR ID	DWR_RD0524_01_s _ 2012_14										

Action/Comments

Remove the wild growth other than native grasses from the levee slopes.

Inspector Comments: Bamboo on waterward slope.

LM Start	0.68	Rating **	М	Issue No.	14 (cont)
LM End	0.68	Issue Type +	Ma	Location *	WS

Photo 2 of 3: FA_2014_RD0524_107_14_20141020_00022.jpg



Looking south at dying bamboo on waterward slope. (Spring 2013)

Photo 3 of 3: FA_2014_RD0524_107_14_20141020_00023.jpg



Looking south at bamboo on waterside slope. (Fall 2012)

Photo 1 of 1 : SJR2014_RD0524U01RM41.39_1.jpg

LM Start	0.77	Rating **	U	Issue No.		132			
LM End	0.78	Issue Type +	Ma	Location *		WS			
Category	Suppleme	ental		GPS La	titud	le/Longitude			
Calegory				Start		End			
Item	DWR Ero	sion Survey		37.93682	21 °	37.936821 °			
пеш				-121.33458	32 °	-121.334582 °			
DWR ID									
	Action/Comments								

Inspector Comments: 06/19/2014: No significant change observed. 08/13/2013: No significant change at this site.

08/07/2012: The site has been visited by boat survey. No significant change observed.

08/23/2011: The site is located immediately upstream of a Railroad bridge. Dense vegetation at the water line blocks the view of erosion.

Front view of the erosion site. Vegetation is visible.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

0.78	Rating **	М	Issue No.		262	
0.78	Issue Type +	Ма	Location *	LS		
Earthen L	evee		GPS La	atitud	e/Longitude	
			Start		End	
Vegetatio	n		37.9365	55 °	37.936555 °	
			-121.3348	47 °	-121.334847 °	
DWR ID DWR_RD0524_01_s _ 2012_262						
	0.78 Earthen L Vegetation	0.78 Issue Type + Earthen Levee Vegetation	0.78 Issue Type + Ma Earthen Levee Vegetation	0.78 Issue Type + Ma Location * Earthen Levee GPS La Start Start Vegetation 37.9365 -121.3348	0.78 Issue Type + Ma Location * Earthen Levee GPS Latitud Start Vegetation 37.936555 ° -121.334847 °	

Action/Comments

Remove the wild growth other than native grasses from the levee slopes.

Inspector Comments: Dense vegetation at landside toe along fence line.



Looking southwest at vegetation on landward slope and toe. (Spring 2013)

LM Start	0.78	Rating **	М	Issue No.	262 (cont)
LM End	0.78	Issue Type +	Ma	Location *	LS

Photo 2 of 2: FA_2014_RD0524_107_262_20141020_00143.jpg



Looking west at dense vegetation on landside toe.

LM Start	0.79	Rating **	М	Issue No.		16	
LM End	0.79	Issue Type +	En	Location *		LS	
Category	Suppleme	ental		GPS La	tituc	le/Longitude	
Category				Start		End	
Item	DWR UC	P Field Study		37.93647	'4 °	37.936474	. 0
item				-121.33483	° 08	-121.334830	٥
DWR ID	DWR_RD0	524_01_f _ 201	4_16				

Action/Comments

Inspector Comments: FS_ID:17571

EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Large hole in pipe at WS toe. Appears abandoned

and should be done so properly.

No Photos

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River		6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	0.79	Rating **	М	Issue No.	76		
LM End	0.79	Issue Type +	Ma	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End	
Item	Trim / Thi	n Trees		37.9364	44 °	37.936444	0
item		-121.3347	97 °	-121.334797	0		
DWR ID	DWR_RD0524_01_s _ 2012_76						
Action/Comments							

Trim trees to at least five feet above ground level.



Looking southwest at low hanging tree branches at landside toe.

LM Start	0.82	Rating **	U	Issue No.	2	
LM End	0.82	Issue Type +	Ма	Location *	LS	
Category Earthen Levee			GPS Latitude/Longitude			
Category			Start		End	
Item	Erosion /	Bank Caving		37.9360	93 °	37.936004°
item				-121.3346	48 °	-121.334615 °
DWR ID DWR_RD0524_01_f _ 2013_2					·	
	Action/Comments					

Sch slope.

Rating **

Issue Type +

0.82

0.82

LM Start

LM End

M Start	0.82	Rating **	U	Issue No.		2
.M End	0.82	Issue Type +	Ма	Location *		LS
ategory	Earthen L	.evee		GPS La	atitude	e/Longitude
ategory				Start		End
Item	Erosion /	Bank Caving		37.9360	93 °	37.936004 °
пеш				-121.3346	48 °	-121.334615 °
WR ID	DWR_RD0	524_01_f _ 201	3_2			
		Action/	Comme	nts		
		rosion site prid				
spector (Comments	: Several hole	es and fi	nger erosio	ns or	landward

Issue No.

Location *

2 (cont)

LS

Photo 2 of 5: FA_2014_RD0524_107_2_20141020_00003.jpg





Looking west at hole on landward shoulder.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	0.82	Rating **	U	Issue No.		2 (cont)	
LM End	0.82	Issue Type +	Ма	Location *	LS		
Category	Earthen L	evee		GPS Lat	itud	e/Longitude	
Calegory	Category		Start		End		
Item	Erosion /	Bank Caving		37.93609	3 °	37.936004	0
пеш				-121.33464	8 °	-121.334615	0
DWR ID	DWR_RD0	524_01_f _ 201	3_2				

Action/Comments

Schedule repair of erosion site prior to the next inspection. Inspector Comments: Several holes and finger erosions on landward slope.

LM Start	0.82	Rating **	U	Issue No.	2 (cont)
LM End	0.82	Issue Type +	Ma	Location *	LS

Photo 3 of 5 : FA_2014_RD0524_107_2_20141020_00004.jpg



Looking southeast at finger erosion on landward slope.

Photo 4 of 5: FA_2014_RD0524_107_2_20141020_00005.jpg



Looking east at erosion on landward slope.

LM Start	0.82	Rating **	U	Issue No.	2 (cont)
LM End	0.82	Issue Type +	Ма	Location *	LS





Looking northeast at several finger erosion on landward slope.

** Rating
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated
M: Minimally Acceptable
C: Corrected
M: Minimally Acceptable
U: Unacceptable
A/W: Acceptable but Monitor & Maintain

** Rating
A: Issue Type
Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	0.83	Rating **	U	Issue No.		133		
LM End	0.84	Issue Type + Ma		Location *		WS		
Category	Supplemental			GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR Ero	sion Survey		37.9359	30°	37.935930	0	
item				-121.3341	33 °	-121.334133	0	
DWR ID								

Action/Comments

Inspector Comments: 06/19/2014: No significant change observed. 08/13/2013: Site was discovered during boat survey. The dense vegetation blocks a clear view of the erosion. Size of erosion site was very roughly estimated. [2014 Site ID:RD0524U01RM41.44]



Close view of the site. Dense vegetation covers the erosion.

LM Start	0.91 Rating ** U		Issue No.		134		
LM End	0.91	1 Issue Type + Ma		Location *		WS	
Category	Supplemental			GPS Latitude/Longitude			
Calegory					Start		
Item	DWR Ero	sion Survey		37.9355	76 °	37.935576	0
item				-121.3332	02 °	-121.333202	0
DWR ID							

Action/Comments

Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: No significant change at this site.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: The erosion site is immediately downstream of the riprap protection. [2014 Site ID:RD0524U01RM41.5]



Front view of the erosion. Note the riprap protection near the site.

LM Start	0.92	Rating **	М	Issue No.		122	
LM End	0.92	Issue Type +	Ma	Location *	* WS		
Category	Earthen L	evee		GPS La	titud	e/Longitude	
Calegory			Start		End		
Item	Encroach	ments		37.9352	67°	37.935267°	
пеш				-121.3329	35 °	-121.332985 °	
DWR ID	DWR_RD0	524_01_s _ 201	3_122			·	

Action/Comments

Pipe

Inspector Comments: Inch and half metal pipe should be removed.



Looking northwest at inch and half metal pipe on waterward slope.

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	0.94	Rating **	М	Issue No.	ue No. 77		
LM End	1.02	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Trim / Thi	Trim / Thin Trees			59 °	37.935049	
item				-121.3328	64 °	-121.331334	
DWR ID	DWR_RD0524_01_s _ 2012_77						
Action/Comments							

Trim trees to at least five feet above ground level.

Photo 1 of 1: FA_2014_RD0524_107_77_20141020_00079.jpg



Looking south at low hanging tree branches at landside toe.

LM Start	0.97	Rating **	A/W	Issue No.	20		
LM End	0.97	Issue Type +	Ma	Location *	WS		
Catagory	evee	GPS Latitude/Longitude					
Category				Start		End	
Item	Trim / Thi	Trim / Thin Trees			81 °	37.935181 °	
item					97 °	-121.332297 °	
DWR ID	DWR_RD0524_01_f _ 2013_20						
Action/Comments							

Trim trees over roadway to at least 12 feet above ground level.

No Photos

LM Start	0.98	Rating **	Rating ** M Issue No.		22	
LM End	0.98	Issue Type +	En	Location *		WS
Catagony	Suppleme	ental		GPS La	tituc	le/Longitude
Category				Start		End
Item	DWR UCI	DWR UCIP Field Study			8°	37.935178 °
item				-121.33202	9°	-121.332029 °
DWR ID	DWR_RD0	524_01_f _ 201	4_22			·

Action/Comments

Inspector Comments: FS_ID:22724

EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe abandoned and should be done so properly. FIELD_STRUCT_DESC: *Abandoned* 14-inch pipe through the levee 6.0 feet below the crown. Concrete pad for pump on WS shoulder. No pump or other appurtances remain. Originally included in the 1964

O&M manual. FS Date: 8/16/2013 No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.00	Rating **	U	Issue No.		135	
LM End	1.00	Issue Type +	Ma	Location *		WS	
Category Supplemental			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	DWR Erosion Survey			37.9354	10 °	37.935410	
item				-121.3315	60°	-121.331560	
DWR ID							

Action/Comments

Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: No significant change at this site.

08/07/2012: The erosion was discovered during the boat survey. [2014 Site ID:RD0524U01RM41.58]

Photo 1 of 1 : SJR2014	4_RD0524U	01RM41	.58_1.jp	g
and and				
			TE 2 4	
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Close view of the erosion.

LM Start	1.00	Rating **	U	Issue No.		139	
LM End	1.00	Issue Type +	Ma	Location *		WS	
Category			GPS La	atitud	le/Longitude		
Calegory				Start		End	
Item	DWR Erosion Survey			37.9353	26 °	37.935326	0
item				-121.3315	37 °	-121.331537	0
DWR ID							

Action/Comments

Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: No significant change at this site.

08/07/2012: The site has been visited by boat survey. Site has been repaired, but new erosion occurred at the levee slope and immediately upstream of the repaired site.

08/23/2011: The site is about 500 ft downstream of bridge. The levee toe seems to be protected, but the protection is being washed away. [2014 Site ID:RD0524U01RM41.59]



Front view of the site.

LM Start	1.03	Rating **	М	Issue No.	17					
LM End	1.03	Issue Type +	Ma	Location *	WS					
Catagory	Category Earthen Levee					GPS Latitude/Longitude				
Calegory				Start		End				
Item	Erosion /	Erosion / Bank Caving			18 °	37.935098	0			
пеш	Item			-121.3312	48 °	-121.331645	0			
DWR ID	DWR_RD0	524_01_s _ 201	2_17							
	Action/Comments									

Schedule repair of erosion site prior to the next inspection.

Inspector Comments: Minor erosion was noted next to repaired site.



Looking upstream (south) at erosion site.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.03	Rating **	М	Issue No.		17 (cont)		
LM End	1.03	Issue Type +	Ма	Location *		WS		
Category Earthen Levee				GPS Latitude/Longitude				
Calegory				Start		End		
Item	Erosion / I	Erosion / Bank Caving			18 °	37.935098	0	
Item				-121.33124	48 °	-121.331645	0	
DWR ID	DWR_RD0524_01_s _ 2012_17							

Action/Comments

Schedule repair of erosion site prior to the next inspection.
Inspector Comments: Minor erosion was noted next to repaired site.



Looking southeast at erosion next to repaired site on waterward slope (Spring 2013)

LM Start	1.03	Rating **	М	Issue No.	17 (cont)
LM End	1.03	Issue Type +	Ma	Location *	WS

Photo 3 of 3: FA_2014_RD0524_107_17_20141020_00026.jpg



Looking north at erosion site next to repaired site. (Spring 2012)

LM Start	1.08	Rating **	M	Issue No.		29	
LM End	1.08	Issue Type +	En	Location *	WS		
Category				GPS La	titud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	P Field Study		37.93477	8 °	37.934778	0
пеш		-121.33046	0°	-121.330460	0		
DWR ID	DWR_RD0	524_01_f _ 201	4_29				

Action/Comments

Inspector Comments: FS_ID:18703

EP_NO: 2725B

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Given amount of rust on adjacent CMP riser, it may

be appropriate to do a video inspection of this pipe.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.08	Rating **	М	Issue No.	47			
LM End	1.08	Issue Type +	En	Location *	WS			
Category				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UC	P Field Study		37.93475	0 °	37.934750	0	
пеш				-121.33040	5 °	-121.330405	0	
DWR ID	DWR_RD0	524_01_f _ 201	4_47					

Action/Comments

Inspector Comments: FS_ID:17589

EP_NO: 2725B

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: CMP riser severely corroded. Good indicator of potential condition of 48-inch pipe. Recommend Video Inspection. FIELD_STRUCT_DESC: 48-inch CMP sewer line through the levee 16.0 feet below crown. Runs underneath the river and through levee with 36-inch CMP riser/inspection chamber on landward shoulder. Distribution/pumphouse on LS toe (Permit No. 2725B, 1959). Included in the 1964 O&M manual.

FS Date: 8/16/2013

Photo 1 of 5 : FA	_2014_RD0524_	107_18_201	41020_00027.jpg
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No Photos



Landward slope damage at LM 1.09.

LM Start	1.09	Rating **	М	Issue No.		18	
LM End	1.09	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End	
Item	Slope Sta	bility		37.9346	45 °	37.934645°	
пеш				-121.3303	10°	-121.330310 °	
DWR ID	DWR_RD0524_01_s _ 2012_18						

Action/Comments

Repair slope instability.

Inspector Comments: Slope damage extend from shoulder to middle of

slope.

U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.09 Rating ** M		Issue No.		18 (cont)		
LM End	1.09	Issue Type +	Issue Type + Ma			LS	
Earthen Levee				GPS La	titud	e/Longitude	
Category				Start		End	
Item	Slope Sta	bility		37.93464	15 °	37.934645	0
item				-121.3303	0°	-121.330310	0
DWR ID	R ID DWR_RD0524_01_s _ 2012_18						

Action/Comments

Repair slope instability.

Inspector Comments: Slope damage extend from shoulder to middle of slope.

LM Start	1.09	Rating **	М	Issue No.	18 (cont)
LM End	1.09	Issue Type +	Ma	Location *	LS

Photo 2 of 5: FA_2014_RD0524_107_18_20141020_00028.jpg



Updated picture of the erosion site on the landside shoulder.

Photo 3 of 5: FA_2014_RD0524_107_18_20141020_00029.jpg



Looking south at caving on landside shoulder. (Sping 2012)

LM Start	1.09	Rating **	М	Issue No.	18 (cont)
LM End	1.09	Issue Type +	Ma	Location *	LS



Looking at updated slope stability as of 4/2010.

Location + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence N/A: Not Applicable LS: Land Side : Acceptable : Minimally Acceptable N : Not Inspected/Rated WS : Water Side C : Corrected U : Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.09	Rating **	М	Issue No.		18 (cont)	
LM End	1.09	Issue Type +	Ma	Location *	LS		
Catagony	Earthen Levee			GPS Latitude/Longitude			
Category		Start		End			
Item	Slope Sta	bility		37.93464	۱5 °	37.934645 °	
item				-121.33031	0 °	-121.330310 °	
DWR ID	DWR ID DWR_RD0524_01_s _ 2012_18						
		A .: /	_				

Action/Comments

Repair slope instability.

Inspector Comments: Slope damage extend from shoulder to middle of slope.



Updated view from above the slope stability.

LM Start	1.14	Rating **	М	Issue No.		175	
LM End	1.14	Issue Type +	Ma	Location *		WS	
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Trim / Thi	n Trees		37.9341	71 °	37.934171	
пеш				-121.3295	84 °	-121.329584	
DWR ID	DWR_RD0524_01_f _ 2014_175						
	Action/Comments						

Trim trees over roadway to at least 12 feet above ground level. Inspector Comments: T

No Photos

LM Start	1.14	Rating **	М	Issue No.	19		
LM End	1.17	Issue Type +	Ма	Location *	WS		
Category	Earthen L		GPS Latitude/Longitude				
Category				Start		End	
Item	Trim / Thi	n Trees		37.93411	8 °	37.933775 °	
item				-121.32965	57 °	-121.329305 °	
DWR ID	DWR_RD0	R_RD0524_01_s _ 2012_19					
	Action/Comments						

Trim trees to at least five feet above ground level.





Looking northwest at low hanging tree branches at waterside toe.

*Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable
N : Not Inspected/Rated
M : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.16	Rating **	U	Issue No.		141		
LM End	1.24	Issue Type +	Ма	Location *		WS		
Catagony	Supplemental			GPS Latitude/Longitude				
Category		Start		End				
Item	DWR Ero	sion Survey		37.9333	47 °	37.933347	0	
item		•		-121.3291	10 °	-121.329110	0	
DWR ID								

Action/Comments

Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: No significant change at this site.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: No significant change observed on site.

9/07/2010: No significant change observed on site. Vegetation is visible at the water line. There is an exposed pipe discharge partially hanging at the mid-slope, possibly still used for discharging irrigation/runoff water. There is minimal rip rap protection along the bank, and what's left of it is no longer adequately protecting the bank.

9/29/2009: Site consists of a 400-foot long eroding bank with minimal vegetation and protection; the existing rip rap has sloughed, rendering it useless; note that there is an exposed section of a pipe.

10/18/2006: There is extensive loss of rip rap on some sections; sewage disposal pond is on the landside of the levee; there is an exposed pipe outlet "hanging" from the upper slope. [2014 Site ID:RD0524U01RM41.79]



Direct view of the site.

LM Start	1.17	Rating **	М	Issue No.	915		
LM End	1.25	Issue Type +	Ма	Location *	LS		
Catagory	Earthen Levee				GPS Latitude/Longitude		
Calegory	Calegory					End	
Item	Vegetatio	n		37.9337	75 °	37.932784°	
item				-121.3292	50 °	-121.328765 °	
DWR ID	DWR_RD0524_01_s _ 2012_915						
	Action/Comments						

Remove the wild growth other than native grasses from the levee slopes.



Looking southwest at dense veg. on landside toe.

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.26	Rating **	U	Issue No.		263	
LM End	1.26	Issue Type +	En	Location *	LS		
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Encroach	ments		37.93253	33 °	37.932533	0
item				-121.3286	50 °	-121.328650	0
DWR ID	D DWR_RD0524_01_s _ 2012_263						

Action/Comments

Ramp

Inspector Comments: Unauthorized ramps on landside slope. Ramps were caused by vehicle traffic.

LM Start	1.26	Rating **	U	Issue No.	263 (cont)
LM End	1.26	Issue Type +	En	Location *	LS



Looking northwest at unauthorized ramp on landside slope.

Photo 2 of 2: FA_2014_RD0524_107_263_20141020_00145.jpg



Looking south at unauthorized ramp on landside slope.

LM Start	1.29	Rating **	U	Issue No.		142	
LM End	1.32	Issue Type +	Ма	Location *		WS	
Cotogony	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Itom	DWR Ero	sion Survey		37.9318	58 °	37.931858	0
item	Item			-121.3283	00°	-121.328300	0
DWR ID						,	
	Action/Comments						

Action/Comments

Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: New signs of animal activity were found. 08/07/2012: The site was first reported in 2012 spring levee inspection report. [2014 Site ID:RD0524U01RM41.92]



Front view of the erosion. Note the drainage pipe on the site.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.31	Rating **	М	Issue No.		89	
LM End	1.31	Issue Type +	En	Location *		WS	
Category	Supplemental			GPS Latitude/Longitude			
Category	Category					End	
Item	DWR UC	P Field Study		37.93197	, 0	37.931977	0
пеш				-121.32840 ⁻	0	-121.328401	0
DWR ID	DWR_RD0	524_01_f _ 201	4_89				

Action/Comments

Inspector Comments: FS_ID:17703

EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe appears to be open on both ends. Abandoned

and should be done so properly.

FIELD_STRUCT_DESC: "Abandoned" 12-inch pipe through levee 3.5 feet below crown. Open on both ends. Originally included in the 1964

O&M manual.

FS Date: 8/16/2013 9:57:05 AM

LM Start	1.31	Rating **	М	Issue No.	33		
LM End	1.31	Issue Type +	Ма	Location *	WS		
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory	ry			Start		End	
Item	Encroach	ments		37.93194	48 °	37.931948 °	
item			-121.32838	37 °	-121.328387 °		
DWR ID	DWR_RD0	524_01_s _ 201	12_33				

Action/Comments

Pipe

Inspector Comments: Pipe is not in use and should be properly abandoned.

LM Start	1.31	Rating **	М	Issue No.	33 (cont)
LM End	1.31	Issue Type +	Ma	Location *	WS

Photo 1 of 2: FA_2014_RD0524_107_33_20141020_00041.jpg

No Photos



Looking west at pipe on landside slope.

Photo 2 of 2 : FA_2014_RD0524_107_33_20141020_00042.jpg



Looking north at broken pipe.

*Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy

M: Minimally Acceptable C: C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A/W: Acceptable but Monitor & Maintain Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.33	Rating **	М	Issue No.	130	
LM End	1.37	Issue Type +	Ма	Location *		CR
Category	Earthen Levee			GPS Latitude/Longitude		
Calegory				Start		End
Item		rface / Depres	ssions /	37.9316	58 °	37.931085 °
пеш	Rutting			-121.3282	55 °	-121.328112 °
DWR ID	DWR_RD0	524_01_s _ 201	3_130			
Action/Comments						

Add appropriate gravel or road base. Grade and compact.

No Photos

LM Start	1.39	Rating **	U	Issue No.		143
LM End	1.39	Issue Type +	Ма	Location *		WS
Category	Supplemental			GPS Latitude/Longitude		
Category			Start		End	
Item	DWR Ero	sion Survey		37.93057	75 °	37.930575°
пеш				-121.32809	90 °	-121.328090 °
DWR ID						

Action/Comments

Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: No significant change observed.

08/07/2012: The site was first reported in 2012 spring levee inspection report. The site is located about 750 ft downstream of SR 4 Bridge. [2014 Site ID:RD0524U01RM42.03]



Front view of the erosion.

LM Start	1.45	Rating **	U	Issue No.		144		
LM End	1.47	Issue Type +	Ma	Location *		WS		
Category	Suppleme	GPS Latitude/Longitude						
Calegory		Start		End				
Item	DWR Ero	sion Survey		37.9296	50 °	37.929650	0	
пеш				-121.3281	10°	-121.328110	0	
DWR ID								

Action/Comments

Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: The site is located approximately 400 ft. downstream SR 4 Bridge. Dense vegetation is visible at the toe. [2014 Site ID:RD0524U01RM42.09]



Front view of the erosion site.

Location N/A: Not Applicable LS : Land Side WS : Water Side

A : Acceptable
M : Minimally A : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.51	Rating **	М	Issue No.	916		
LM End	1.51	Issue Type +	Ма	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory			Start		End		
Item	Trim / Thi	n Trees		37.9291	18 °	37.929118	
пеш				-121.3283	68 °	-121.328368	
DWR ID	DWR_RD0524_01_s _ 2012_916						
	Action/Comments						

Trim and thin trees to allow visibility of the ground and room to flood fight.

LM Start	1.51	Rating **	М	Issue No.	916 (cont)
LM End	1.51	Issue Type +	Ma	Location *	LS



Dense vegetation on landside toe.

Photo 2 of 3: FA_2014_RD0524_107_916_20141020_00153.jpg



Looking south at trees on landside slope. (Fall 2012)

LM Start	1.51	Rating **	М	Issue No.	916 (cont)
LM End	1.51	Issue Type +	Ma	Location *	LS



Looking south at dense veg. on landside slope and toe.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy

M: Minimally Acceptable C: C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating

A: Acceptable M: N: Not Inspected/Rated Ma: Maintenance Deficiancy Ob: Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.55	Rating ** A/W		Issue No.		23	
LM End	1.60	Issue Type +	Ma	Location * LS		LS	
Category	Earthen Levee				titud	e/Longitude	
Calegory			Start		End		
Item	Vegetatio	n		37.92838	88°	37.927797	0
item			-121.32828	80 °	-121.327854	0	
DWR ID DWR_RD0524_01_s _ 2012_23							

Action/Comments

Remove the wild growth other than native grasses from the levee slopes.

LM Start	1.55	Rating **	A/W	Issue No.	23 (cont)
LM End	1.60	Issue Type +	Ma	Location *	LS

Photo 1 of 5 : FA_2014_RD0524_107_23_20141020_00035.jpg

Overgrown landscaping on landward slope from LM 1.56 to 1.74

Photo 2 of 5: FA_2014_RD0524_107_23_20141023_00195.jpg



Looking north from landward berm at corrected site.

LM Start	1.55	Rating **	A/W	Issue No.	23 (cont)
LM End	1.60	Issue Type +	Ma	Location *	LS



Looking east from landward berm at corrected site.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A/W: Acceptable but Monitor & Maintain Enforcement

* Issue Type

Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

1.55	Rating **	A/W	Issue No.		23 (cont)			
1.60	Issue Type +	Ма	Location *	Location * LS				
Category Earthen Levee				GPS Latitude/Longitude				
Category					End			
Vegetatio	n		37.9283	88 °	37.927797			
Item			-121.3282	80 °	-121.327854			
DWR ID DWR_RD0524_01_s _ 2012_23								
	1.60 Earthen L Vegetation	1.60 Issue Type + Earthen Levee Vegetation	1.60 Issue Type + Ma Earthen Levee Vegetation	1.60 Issue Type + Ma Location * Earthen Levee GPS La Start Start Vegetation 37.92836 -121.32826	1.60 Issue Type + Ma Location * Earthen Levee GPS Latitud Start Vegetation 37.928388 ° -121.328280 °			

Action/Comments

Remove the wild growth other than native grasses from the levee slopes.

LM Start	1.55	Rating **	A/W	Issue No.	23 (cont)
LM End	1.60	Issue Type +	Ma	Location *	LS

Photo 4 of 5: FA_2014_RD0524_107_23_20141023_00197.jpg



Looking south from levee crown at corrected site.

Photo 5 of 5: FA_2014_RD0524_107_23_20141023_00198.jpg



Looking south from levee crown at upstream end of corrected site.

LM Start	1.56	Rating **	М	Issue No.		99	
LM End	1.56	Issue Type +	En	Location *		LS	
Category	Suppleme	pplemental			GPS Latitude/Longitude		
Calegory	Category					End	
Item	DWR UC	IP Field Study		37.92842	29 °	37.928429	0
пеш				-121.32829	97 °	-121.328297	0
DWR ID	DWR_RD0	524_01_f _ 201	4_99				
		Action/	Comme	nts			

Inspector Comments: FS_ID:17798

EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: No permit identified for this crossing.

FIELD_STRUCT_DESC: Fiber optics cable crossing. USAA marker

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.58	Rating **	U	Issue No.	145		
LM End	1.64	Issue Type +	Ma	Location *	WS		
Category	Supplemental			GPS Latitude/Longitude			
Category				Start		End	
Item	DWR Ero	sion Survey		37.92777	'0	37.927770°	
пеш				-121.32787	'0	-121.327870 °	
DWR ID							

Action/Comments

Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: No significant change observed on site. Trees concerned still in place.

09/07/2010: No significant change observed on site. The concern here is the undermining of the levee toe where most of trees are. There are erosion pockets lined along the lower slope and at the base of the trees, exposing tree roots. There is minimal slope protection. 09/29/2009: The lower slope is lined with minor erosion pockets; some tree roots are exposed; there is visible undermining of the levee toe; site is immediately upstream of the Highway 4 Bridge; the bridge is possibly causing a scour to occur, eroding the bank. [2014 Site ID:RD0524U01RM42.2]



Front view of the site where undermining has occurred.

LM Start	1.60	Rating **	М	Issue No.		136		
LM End	1.60	Issue Type +	Ма	Location *	on * CR		Location * CI	
Category Earthen Levee				GPS Latitude/Longitude				
Calegory			Start		End			
Item	Slope Stability			37.9277	75 °	37.927775 °		
item			-121.3278	60 °	-121.327860 °			
DWR ID DWR_RD0524_01_s _ 2013_136								
	A - 1' 1'O 1 -							

Action/Comments

Repair the levee slope damaged by foot traffic and prevent access where possible.



Looking south at depression on levee crown near wateward shoulder.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating

A: Issue Type

Ma: Maintenance Deficiancy

Ob: Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.62	Rating **	М	Issue No.		24		
LM End	1.63	Issue Type +	Ma	Location *	LS			
Catagory	Category Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End		
Item	Vegetation		37.9276	35 °	37.927540°			
item				-121.3278	12 °	-121.327648 °		
DWR ID	DWR_RD0524_01_s _ 2012_24							

Action/Comments

Remove the wild growth other than native grasses from the levee slopes.

Inspector Comments: Vegetation blocking landward toe.

LM Start	1.62	Rating **	М	Issue No.	24 (cont)
LM End	1.63	Issue Type +	Ma	Location *	LS



Looking south at vegetation blocking view of landward toe.

Photo 2 of 2: FA_2014_RD0524_107_24_20141020_00036.jpg



Looking north at dense vegetation on the landside and waterside slopes.

LM Start	1.62	Rating **	A/W	Issue No.	25	
LM End	1.63	Issue Type +	Ма	Location *	WS	
Category Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End
Item	, Vegetation			37.92763	35 °	37.927540 °
item				-121.3278 ⁻	12 °	-121.327648 °
DWR ID	DWR_RD0524_01_s _ 2012_25					
Action/Comments						

Remove the wild growth other than native grasses from the levee slopes.



Looking southeast at dense vegetation on the waterside slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.63	Rating **	М	Issue No. 26			
LM End	1.66	Issue Type +	Ma	Location *	WS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory			Start		End		
Item	Erosion /	Erosion / Bank Caving)7 °	37.927295 °	
пеш				-121.32759	93 °	-121.327298 °	
DWR ID	DWR_RD0	12_26					
Action/Comments							

Note and monitor erosion site.

No Photos

LM Start	1.64	Rating **	U	Issue No.		39	
LM End	1.64	Issue Type +	En	Location *	WS	_	
Category Earthen Levee			GPS La	titud	e/Longitude		
Calegory				Start		End	
Item	Encroach	Encroachments			'2 °	37.927372	٥
item				-121.32727	'8	-121.327278	0
DWR ID	DWR_RD0	524_01_s _ 201	2_39				

Action/Comments

Pole

Inspector Comments: Landowner constructed boat dock without permission from the CVFPB.

LM Start	1.64	Rating **	U	Issue No.	39 (cont)
LM End	1.64	Issue Type +	En	Location *	WS

Photo 1 of 2 : FA_2014_RD0524_107_39_20141020_00052.jpg



Looking at garbage on waterside slope.

Photo 2 of 2 : FA_2014_RD0524_107_39_20141020_00053.jpg



Looking east at non-permitted boat dock.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating

A: Assue Type

Ma: Maintenance Deficiancy

Ob: Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.66	Rating **	N	Issue No.	8			
LM End	1.70	Issue Type +	Ма	Location *		WS		
Category Earthen Levee				GPS Latitude/Longitude				
Calegory				Start		End		
Item	Trim / Thin Trees		37.92725	55 °	37.926855	0		
item				-121.32713	37 °	-121.326672	0	
DWR ID	DWR_RD0524_01_s _ 2012_8							
		Action/	Comme	nts				

Tree stumps.

Inspector Comments: Several tree stumps on waterside shoulder.

No Photos

Issue Type +	Ma				
	ivia	Location *	WS		
Category Earthen Levee			atitud	le/Longitude	
		Start		End	
Encroachments			18 °	37.927018 °	
			72 °	-121.326872 °	
DWR_RD0524_01_s _ 2012_45					
,	chments	chments	Start 37.9270 -121.3268	Start 37.927018 ° -121.326872 °	

Catogory		Start		End				
Item	Encroachments	37.927018	0	37.927018	۰			
пеш		-121.326872	0	-121.326872	0			
DWR ID	DWR_RD0524_01_s _ 2012_45							
	Action/Comments							
Stairway Inspector (Comments: Stairs and retaining v	wall						

	1 1 1 2 2
不放款	

Photo 1 of 3: FA_2014_RD0524_107_45_20141020_00057.jpg

Looking northeast at non-permitted concrete stairs on waterside slope.

Rating ** Issue No. М 45 (cont) LM Start 1.69 Location * WS LM End 1.69 Issue Type + Ma



Looking southwest at retaning wall connected to concrete stairs.

* Location + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence LS : Land Side N/A: Not Applicable A : Acceptable M : Minimally Acceptable N : Not Inspected/Rated WS : Water Side C : Corrected U : Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway		Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.69	Rating **	М	Issue No.	45 (cont)		
LM End	1.69	Issue Type +	Ma	Location *	WS		
Cotogony	Earthen L	GPS La	titud	e/Longitude			
Calegory	Category					End	
Item	Encroachments			37.9270	18 °	37.927018 °	
item				-121.3268	72 °	-121.326872 °	
DWR ID	DWR_RD0524_01_s _ 2012_45						
Action/Comments							
Stairway							

Inspector Comments: Stairs and retaining wall



Looking west at concrete stairs on waterside slope.

LM Start	1.71	Rating **	М	Issue No.	27			
LM End	1.73	Issue Type +	Ma	Location *		WS		
Category Earthen Levee				GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Slope Sta	bility		37.9267	28 °	37.926730	•	
пеш				-121.3265	97 °	-121.326508	0	
DWR ID	DWR_RD0524_01_s _ 2012_27							
Action/Comments								

Repair slope instability.

No Photos

LM Start	1.75	Rating **	М	Issue No. 28		28	
LM End	1.75	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory	Category					End	
Item	Encroach	Encroachments			22 °	37.926322 °	
item					15 °	-121.326115 °	
DWR ID	DWR_RD0	524_01_s _ 201	2_28				
Action/Comments							

Garbage

Inspector Comments: Large pruning piles on landside slope.



Looking southwest at trash and a pruning pile on landward berm.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy

M: Minimally Acceptable C: C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating

A: Acceptable M: N: Not Inspected/Rated Ma: Maintenance Deficiancy Ob: Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway		Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River		6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.75 Rating ** M			Issue No.		28 (cont)		
LM End	1.75 Issue Type + Ma			Location *		LS		
Catagoni Earthen Levee				GPS La	atitud	le/Longitude		
Category				Start		End		
Item	Encroach	ments		37.9263	22 °	37.926322	0	
item		-121.3261	15 °	-121.326115	0			
DWR ID	DWR_RD0524_01_s _ 2012_28							
	Action/Comments							

Garbage

Inspector Comments: Large pruning piles on landside slope.



Looking at southwest at a pruning pile at landward berm.

Photo 1 of 1: FA_2014_RD0524_107_181_20141020_00137.jpg

LM Start	1.76 Rating ** M			Issue No.		181	
LM End	1.76	Issue Type +	Ма	Location *		N/A	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Encroach	ments		37.9259	72 °	37.925972	0
item			-121.3257	69 °	-121.325769	0	
DWR ID	DWR_RD0524_01_s _ 2014_181						
Action/Comments							

Material

Inspector Comments: Landowner stockpiling pallets at landward toe.



Looking west at wooden pallets at landward toe.

LM Start	1.77	Rating **	U	Issue No.	46					
LM End	1.77	Issue Type +	Ма	Location *	N/A					
Category Earthen Levee				GPS Lat	itud	le/Longitude				
Category				Start		End				
Item	Encroach		37.92599	3°	37.926152	0				
пеш				-121.32577	7 °	-121.325927	0			
DWR ID	DWR_RD0	524_01_s _ 201	2_46							
		A -4: / C 4 -								

Tree or limb

Inspector Comments: Downed tree limbs on landward slope.



Looking south at tree limbs on landward slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway		Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.77 Rating ** U			Issue No.		46 (cont)	
LM End	1.77	Issue Type +	Ma	Location * N/A			
Earthen Levee				GPS La	titud	le/Longitude	
Category				Start		End	
Item	Encroach	ments		37.9259	93 °	37.926152	•
item		-121.3257	77 °	-121.325927	0		
DWR ID	DWR_RD0524_01_s _ 2012_46						
Action/Comments							

Tree or limb

Inspector Comments: Downed tree limbs on landward slope.

LM Start	1.77	Rating **	U	Issue No.	46 (cont)
LM End	1 77	Issue Type +	Ma	Location *	N/A



Looking southwest at tree limbs on landward slope.

Photo 3 of 4: FA_2014_RD0524_107_46_20141023_00203.jpg



Looking south at tree limbs on landward slope.

LM Start	1.77	Rating **	U	Issue No.	46 (cont)
LM End	1.77	Issue Type +	Ma	Location *	N/A



Looking southwest at dense vegetation and low hanging tree branches on landside slope and toe.

*Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

**Rating

A : Acceptable N : Not Inspected/Rated M : Maintenance Deficiancy

C : Corrected Ob : Design & System Obsolescence

U : Unacceptable A/W : Acceptable but Monitor & Maintain

**Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence

En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.80	Rating **	A/W	Issue No.		100	
LM End	1.80	Issue Type +	Ма	Location *	LS		
Catagoria Earthen Levee			GPS Latitude/Longitude				
Category				Start		End	
Item	Encroach	37.9257	52 °	37.925752 °			
item		-121.325592 °		-121.325592 °			
DWR ID	DWR_RD0524_01_s _ 2012_100						
Action/Comments							
Prunings							



Looking southwest at prunings on landside toe.

LM Start	1.82	Rating **	М	Issue No.		103	
LM End	1.82	Issue Type +	En	Location *		LS	
Category	Supplemental			GPS Latitude/Longitude			
Calegory	Category		Start		End		
Item	DWR UCIP Field Study			37.92548	o °	37.925480	0
пеш				-121.32535	в°	-121.325358	0
DWR ID	DWR_RD0524_01_f _ 2014_103						
	A :: 10						

Action/Comments

Inspector Comments: FS_ID:21866 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: No permit identified for crossing.

FIELD_STRUCT_DESC: 12-inch wrapped steel irrigation pipe through the levee at an unknown depth below the crown. Pump, butterfly valves, vent, and siphon breaker at concrete pad 50-feet off LS toe. Siphon breaker in 14-inch concrete standpipe on LS shoulder.

FS Date: 8/20/2013

Nο	Photos

LM Start	1.83	Rating **	М	Issue No.		137	
LM End	1.83	Issue Type +	En	Location *		LS	
Category Supplemental				GPS Latitude/Longitude			
				Start		End	
Item	DWR UCIP Field Study				31 °	37.925431 °	
item			-121.3253	10 °	-121.325310 °		
DWR ID DWR_RD0524_01_f _ 2014_137							
Action/Comments							

Inspector Comments: FS_ID:21865

EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipes apear abandoned and should be removed from

levee.

FIELD_STRUCT_DESC: One 1-inch and two 3/4-inch PVC conduits

through the levee 6-inches below the crown.

FS Date: 8/20/2013

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.83	Rating **	М	Issue No.		140	
LM End	1.83	Issue Type +	En	Location *	LS		
Category Supplemental			GPS Latitude/Longitude				
Calegory	эгу			Start		End	
Item	DWR UC	P Field Study		37.925429	°	37.925429	0
пеш				-121.325323	°	-121.325323	0
DWR ID	DWR_RD0	524_01_f _ 201	4_140				

Action/Comments

Inspector Comments: FS_ID:17847

EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe appears abandoned and if so should be done so

properly.

FIELD_STRUCT_DESC: 14-inch pipe through levee 20.0 feet below crown, 2 pumps and gate valves discharge into surge tank in pump house on the waterward slope. Concrete distribution box removed from the waterward slope. Abandoned 36-inch diameter concrete standpipe on LS toe next to service pole. Originally included in the 1964 O&M manual.

FS Date: 8/20/2013

LM Start	1.90	Rating **	М	Issue No.		78	
LM End	1.95	Issue Type +	En	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Category		Start		End			
Item	Vegetatio	/egetation			64 °	37.923805 °	
пеш				-121.32447	73 °	-121.324238 °	
DWR ID	DWR ID DWR_RD0524_01_s _ 2012_78					·	
Action/Comments							

Landscaping

No Photos



Looking southwest at landscaping on landside slope. (Spring 2012)

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.95	Rating **	A/W	Issue No.		104
LM End	1.95	Issue Type +	En	Location *	Location * W	
Category	Earthen Levee			GPS Latitude/Longitude		
Calegory				Start		End
Item	Vegetatio	n		37.9238	08 °	37.923808 °
пеш				-121.32420	60 °	-121.324260 °
DWR ID	DWR_RD0	524_01_s _ 201	12_104			

Action/Comments

Remove the wild growth other than native grasses from the levee slopes.

Inspector Comments: Bamboo outside of the twenty foot vegetation zone.

LM Start	1.95	Rating **	A/W	Issue No.	104 (cont)
LM End	1.95	Issue Type +	En	Location *	WS



Looking northeast at sprayed bamboo on waterside slope. (Fall 2012)

Photo 2 of 2: FA_2014_RD0524_107_104_20141020_00097.jpg



Looking southeast at bamboo on waterside slope.

LM Start	2.01	Rating **	М	Issue No.		105	
LM End	2.01	Issue Type +	En	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End	
Item	Trim / Thi	Frim / Thin Trees			32 °	37.923032 °	
пеш				-121.32393	33 °	-121.323933 °	
DWR ID	DWR_RD0	524_01_s _ 201	12_105				
	Action/Comments						
Trim trees	to at least	five feet abov	e groun	d level.			

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.01	Rating **	М	Issue No.	4	
LM End	2.01	Issue Type +	En	Location *		LS
Category Earthen Levee			GPS Latitude/Longitude			
Calegory	Category					End
Itom	Encroach	ments		37.9230	68 °	37.923068
item	Item				90 °	-121.323990 °
DWR ID DWR_RD0524_01_f _ 2012_4						
Action/Comments						

Stairway

Inspector Comments: Landowner installed rubber tires for a stairway on landside slope.

Photo 1 of 1: FA_2014_RD0524_107_4_20141020_00010.jpg



Looking west at rubber tires being used as stairs on landside slope.

LM Start	2.01	Rating **	М	Issue No.		149
LM End	2.01	Issue Type +	En	Location *		LS
Catagory	Supplemental			GPS Latitude/Longitude		
Calegory	Category					End
Item	DWR UC	P Field Study		37.92302	22 °	37.923022 °
пеш				-121.32395	53 °	-121.323953 °
DWR ID	DWR_RD0	524_01_f _ 201	4_149			

Action/Comments

Inspector Comments: FS_ID:21872 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: No permit identified for this crossing.

FIELD_STRUCT_DESC: 3-inch PVC domestic non-potable water line through the levee at unknowd depth below the crown. Pump on

concrete pad at WS toe.

FS Date: 8/20/2013

No Photos

LM Start	2.02	Rating **	М	Issue No.	106	
LM End	2.02	Issue Type +	En	Location *	LS	
Category Earthen Levee			GPS Latitude/Longitude			
Calegory			Start		End	
Item	Vegetatio	n		37.92292	3 °	37.922923 °
пеш				-121.32383	7 °	-121.323837 °
DWR ID DWR_RD0524_01_s _ 2012_106						
Action/Comments						

Landscaping

Photo 1 of 1: FA_2014_RD0524_107_106_20141020_00098.jpg



Looking southwest at ground cover on landward slope.

* Location + Issue Type A : Acceptable M : Minimally A Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence N/A: Not Applicable LS : Land Side N : Not Inspected/Rated : Minimally Acceptable WS : Water Side C : Corrected U : Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.03	Rating **	М	Issue No. 182		182	
LM End	2.06	Issue Type +	En	Location *		N/A	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End	
Item	Encroach	ments		37.92283	7 °	37.922514	0
item			-121.323785 °		-121.323504	0	
DWR ID	DWR_RD0	524_01_s _ 201	14_182				

Action/Comments

Ditch

Inspector Comments: Old irrigation ditch at the landward toe should be removed.

LM Start	2.03	Rating **	М	Issue No.	182 (cont)
LM End	2.06	Issue Type +	En	Location *	N/A



Looking northwest at an old irrigation ditch at landward toe.

Photo 2 of 2: FA_2014_RD0524_107_182_20141020_00139.jpg



Looking southwest at an old irrigation ditch at landward toe.

LM Start	2.05	Rating **	М	Issue No.		150		
LM End	2.05	Issue Type +	En	Location *		N/A		
Category	Suppleme	ental		GPS La	atitud	le/Longitude		
Calegory				Start		End		
Item	DWR UC	P Field Study	,	37.9225	35 °	37.922535	0	
пеш				-121.3235	68 °	-121.323568	0	
DWR ID	DWR_RD0	524_01_f _ 201	4_150					
		Action/	Comme	nte				

Inspector Comments: FS_ID:21883

EP_NO: N/A

Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: Pipe abandoned and should be done so properly.

Holes visible throughout exposed pipe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.09	Rating **	М	Issue No.	151		
LM End	2.09	Issue Type +	En	Location *	N/A		
Category			GPS Latitude/Longitude				
Calegory		S		Start		End	
Item	DWR UC	IP Field Study		37.92208	o °	37.922080	0
пеш				-121.32311	8°	-121.323118	0
DWR ID	DWR_RD0	524_01_f _ 201	4_151				

Action/Comments

Inspector Comments: FS_ID:21895

EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: No permit identified for this crossing.

FIELD STRUCT DESC: 6-inch steel irrigation pipe through the levee at

an unknown depth. Vent, meter, butterfly valve, and pump at

pumphouse on WS slope. FS Date: 8/20/2013

LM Start	2.10	Rating **	М	Issue No.		152		
LM End	2.10	Issue Type +	En	Location *	N/A			
Category				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	P Field Study		37.9220	64 °	37.922064 °		
пеш			-121.323084 °		-121.323084 °			
DWR ID	DWR_RD0	524_01_f _ 201	4_152			·		

Action/Comments

Inspector Comments: FS_ID:17944

EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Soil excavated from cover over pipe on WS next to

concrete riser. May indicate a leak or other problem.

FIELD_STRUCT_DESC: 20-inch steel pipe through the levee 15.0 feet below the crown. Pump in pump house on the waterward slope. Slide gate in 4-foot diameter concrete standpipe on WS slope with secondary concrete standpipe. PVC standpipe visible 350-feet off LS toe.

Originally included in the 1964 O&M manual.

FS Date: 8/20/2013

No Photos

No Photos

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.10	Rating **	A/W	Issue No.	183			
LM End	2.10	Issue Type +	Ma	Location *	WS			
Category Earthen Levee				GPS Latitude/Longitude				
Category				Start		End		
Item	Vegetatio	n		37.92200)9 °	37.922009	٥	
пеш				-121.3230°	15 °	-121.323015	0	
DWR ID	DWR ID DWR_RD0524_01_s _ 2014_183							
	Action/Comments							

Remove the wild growth other than native grasses from the levee

Inspector Comments: Cactus on waterward slope.

No Photos

No Photos

LM Start	2.15	Rating **	A/W	Issue No.	6			
LM End	2.22	Issue Type +	Ма	Location *	WS			
Category Earthen Levee				GPS Latitude/Longitude				
Calegory				Start		End		
Item	Vegetatio	n		37.9215	40 °	37.920959 °		
пеш				-121.3222	93 °	-121.321365 °		
DWR ID DWR_RD0524_01_f _ 2012_6								
	Action/Comments							

Remove the wild growth other than native grasses from the levee slopes.

LM Start	2.17	Rating **	A/W	Issue No.	30			
LM End	2.18	Issue Type +	Ma	Location *	WS			
Category Earthen Levee				GPS Latitude/Longitude				
Category		Start		End				
Item	Erosion /	Bank Caving		37.92138	3°	37.921300	0	
iteiii				-121.32204	3°	-121.321902	0	
DWR ID	DWR_RD0	524_01_s _ 201	2_30					
	Action/Comments							

Note and monitor erosion site.

No Photos

* Location LS : Land Side WS : Water Side

N/A: Not Applicable

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.19 Rating **		U	Issue No.		146		
LM End	2.19	Issue Type +	ие Туре + Ма		Location *		Location *	
Category			GPS Latitude/Longitude					
Calegory				Start		End		
Item	DWR Erosion Survey			37.92099	92 °	37.920992		
пеш					70 °	-121.321370 °		
DWR ID								

Action/Comments

Inspector Comments: 7/22/2014: The erosion has increased in size. 08/13/2013: No significant change observed. Slightly more vegetation was visible.

08/07/2012: The site was first reported in 2012 spring levee inspection report. [2014 Site ID:RD0524U01RM42.79]



View from downstream.

LM Start	2.22	Rating **	М	Issue No.		31	
LM End	2.28	Issue Type +	Ma	Location *	WS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory		Start		End			
Item	Slope Stability			37.9209	92 °	37.920505	0
item				-121.321373 °		-121.320485	0
DWR ID	DWR_RD0524_01_s _ 2012_31						
Action/Comments							

Repair slope instability.

Photo 1 of 1 : FA_2014_RD0524_107_31_20141020_00039.jpg



Looking south slope damage on waterward shoulder and slope.

LM Start	2.25	Rating **	U	Issue No.		147	
LM End	2.28	Issue Type +	Ma	Location *	WS		
Category			GPS Latitude/Longitude				
Category			Start		End		
Item	DWR Ero	sion Survey		37.92065	60°	37.920650 °	
пеш				-121.32037	'0 °	-121.320370 °	
DWR ID						·	
Action/Comments							

Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: An irrigation pipe is on site. [2014 Site ID:RD0524U01RM42.84]



View from upstream.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.29	Rating **	U	Issue No.		32	
LM End	2.31	Issue Type +	ue Type + Ma Loc		Location *		
Category	Earthen Levee			GPS La	titud	e/Longitude	
Calegory			Start		End		
Item	Vegetation			37.92037	'2 °	37.920273	0
item				-121.32023	80 °	-121.320022	0
DWR ID	DWR_RD0524_01_s _ 2012_32						

Action/Comments

Elderberries are blocking visibility and flood fight capability.



Looking south at dense veg on landside slope and toe.

LM Start	2.31 Rating ** (С	Issue No.		148	
LM End	2.33	Issue Type +	Ma	Location *		WS	
Category			GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR Erosion Survey			37.9198	85 °	37.919885 °	
пеш				-121.3197	10 °	-121.319710 °	
DWR ID							

Action/Comments

Inspector Comments: 6/19/2014: The erosion was repaired. 08/13/2013: The length of erosion has progressed downstream, and the site length has increased from 12 ft in length last year to 100 feet in length this year.

08/07/2012: The site was first reported in the 2012 spring levee inspection report. The site is located at the inside corner of a river bend. [2014 Site ID:RD0524U01RM42.93]

LM Start	2.34	Rating **	М	Issue No.		34	
LM End	2.35	Issue Type +	Ма	Location *		WS	
Category Earthen Levee			GPS Latitude/Longitude				
Calegory			Start		End		
Item	Slope Sta	bility		37.91988	35 °	37.919703 °	
пеш			-121.3197	13 °	-121.319702 °		
DWR ID	DWR_RD0	2_34					
Action/Comments							

Repair the levee slope damaged by foot traffic and prevent access where possible.

Inspector Comments: Slope damage caused by walking traffic and using bank as a fishing platform.

Photo 1 of 1: FA_2014_RD0524_107_34_20141020_00043.jpg



Looking northeast at damage to the slope possibly caused by human activity.

Location N/A: Not Applicable LS : Land Side WS : Water Side

A : Acceptable M : Minimally A : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.35	Rating **	М	Issue No.		107		
LM End	2.35	Issue Type +	Ma	Location *		LS		
Category Earthen Levee			GPS La	atitud	e/Longitude			
Calegory			Start		End			
Item	Trim / Thi	Trim / Thin Trees			42 °	37.919742	0	
пеш		-121.3196	23 °	-121.319623	0			
DWR ID	DWR_RD0	524_01_s _ 201	12_107					
Action/Comments								

Trim trees to at least five feet above ground level.

No Photos

Issue No. Rating ** LM Start 2.40 Μ 184 Location * LS Issue Type + Ma LM End 2.40 Earthen Levee GPS Latitude/Longitude Category Start End Trim / Thin Trees 37.919036° 37.919036° Item -121.319969 ° -121.319969 DWR ID DWR RD0524 01 s 2014 184 Action/Comments

Trim trees to at least five feet above ground level.

No Photos

LM Start	2.44	Rating **	U	Issue No.		35		
LM End	2.48	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS Latitude/Longitude				
Calegory				Start		End		
Itom	Vegetation			37.9184	98 °	37.918515	0	
Item			-121.3210	78 °	-121.321110	0		
DWR ID	DWR_RD0	524_01_s _ 201	12_35					
Action/Comments								

Elderberries are blocking visibility and flood fight capability.

Photo 1 of 1: FA_2014_RD0524_107_35_20141020_00044.jpg



Looking southwest at dense vegetation on landward toe.

Location + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence N/A: Not Applicable LS : Land Side A : Acceptable M : Minimally Acceptable N : Not Inspected/Rated WS : Water Side C : Corrected U : Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.46	Rating **	М	Issue No.		36	
LM End	2.50	Issue Type +	Ma	Location *		WS	
Category Earthen Levee			GPS Latitude/Longitude				
Category				Start		End	
Itom	Erosion / Bank Caving			37.9186	28 °	37.918438	0
item	Item				17 °	-121.321452	0
DWR ID DWR_RD0524_01_s _ 2012_36							
	Action/Comments						

Note and monitor erosion site.

Photo 1 of 1: FA_2014_RD0524_107_36_20141020_00045.jpg



Looking east at erosion on waterside slope.

LM Start	2.48	Rating **	М	Issue No.		80	
LM End	2.48	Issue Type +	Ma	Location *	LS		
Catagory Earthen Levee				GPS Latitude/Longitude			
Category		Start		End			
Item	Trim / Thin Trees			37.9184	80 °	37.918480	
item			-121.3211	14 °	-121.321114		
DWR ID DWR_RD0524_01_s _ 2012_80							
Action/Comments							

Trim trees to at least five feet above ground level.

Photo 1 of 2 : FA	_2014_RD0524 _.	_107_80_201 [,]	41020_00082.jpg



Looking southwest at dense vegetation and trees on landside slope. (Fall 2012)

 LM Start
 2.48
 Rating **
 M
 Issue No.
 80 (cont)

 LM End
 2.48
 Issue Type +
 Ma
 Location *
 LS

Photo 2 of 2: FA_2014_RD0524_107_80_20141020_00083.jpg



Looking southwest at dense vegetation on landside toe.

* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

** Rating
A: Acceptable
N: Not Inspected/Rated
M: Ninimally Acceptable
C: Corrected
D: Unacceptable
A/W: Acceptable but Monitor & Maintain

** Rating
A: Issue Type
Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.52	Rating **	U	Issue No.		37	
LM End	2.52	Issue Type +	Ma	Location *		LS	
Earthen Levee			GPS Latitude/Longitude				
Category				Start		End	
Itom	Vegetation			37.9183	45 °	37.918302	0
-121					65 °	-121.321923	0
DWR ID DWR_RD0524_01_s _ 2012_37							
Action/Comments							

Elderberries are blocking visibility and flood fight capability.

W. C.
Looking south at elderherry on landside slone

Photo 1 of 4: FA_2014_RD0524_107_37_20141020_00046.jpg

Looking south at elderberry on landside slope.

 LM Start
 2.52
 Rating **
 U
 Issue No.
 37 (cont)

 LM End
 2.52
 Issue Type +
 Ma
 Location *
 LS

Photo 2 of 4: FA_2014_RD0524_107_37_20141020_00047.jpg



Looking southwest at dense vegetation on landside toe.

Photo 3 of 4: FA_2014_RD0524_107_37_20141020_00048.jpg

LM Start	2.52	Rating **	U	Issue No.	37 (cont)
LM End	2.52	Issue Type +	Ma	Location *	LS



Looking north at elderberry and trees on landside slope.

* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

** Rating

A : Acceptable N : Not Inspected/Rated M : Maintenance Deficiancy

M : Minimally Acceptable CR : Corrected Ob : Design & System Obsolescence

U : Unacceptable A/W : Acceptable but Monitor & Maintain En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.52	Rating **	U	Issue No.		37 (cont)	
LM End	2.52	Issue Type +	Ма	Location *		LS	
Cotagon Earthen Levee			GPS Latitude/Longitude				
Category			Start		End		
Itom	Vegetation			37.9183	45 °	37.918302	•
item	Item					-121.321923	0
DWR ID DWR_RD0524_01_s _ 2012_37							
Action/Comments							

Elderberries are blocking visibility and flood fight capability.

Photo 4 of 4 : FA_2014_RD0524	_107_37_20141020_00049.jpg
D 1/4	



Looking southwest at trees along levee landside toe.

LM Start	2.53	Rating **	U	Issue No.		38
LM End	2.53	Issue Type +	Ма	Location *	WS	
Cotogon/ Earthen Levee			GPS Latitude/Longitude			
Category				Start		End
Item	Vegetation			37.9182	87 °	37.918287
item				-121.3219	80°	-121.321980
DWR ID DWR_RD0524_01_s _ 2012_38						
Action/Comments						

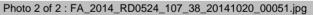
Elderberries are blocking visibility and flood fight capability.

Photo 1 c	of 2 : FA_2	2014_RD0524_107_38_20141020_00050.jpg
	zeAle:	ASSESSED FOR THE



Looking north at elderberry on waterside slope.

LM Start	2.53	Rating **	U	Issue No.	38 (cont)
LM End	2.53	Issue Type +	Ma	Location *	WS





Looking south at elderberry on waterside slope.

Location + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence LS : Land Side N/A: Not Applicable A : Acceptable M : Minimally Acceptable N : Not Inspected/Rated WS : Water Side C : Corrected U : Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.55	Rating **	М	Issue No.		82
LM End	2.59	Issue Type +	Ma	Location *		LS
Earthen Levee				GPS Latitude/Longitude		
Category				Start		End
Item	Slope Sta	bility		37.9180	60°	37.917667 °
item				-121.3223	84 °	-121.322713 °
DWR ID DWR_RD0524_01_s _ 2012_82						
Action/Comments						

Repair slope instability.

Photo 1 of 1: FA_2014_RD0524_107_82_20141023_00206.jpg



Looking southwest at damaged landward slope.

LM Start	2.56	Rating **	М	Issue No.		40	
LM End	2.56	Issue Type +	Ma	Location *		LS	
Earthen Levee				GPS Latitude/Longitude			
Calegory	Category					End	
Item	Vegetatio	n		37.918047 °		37.918047 °	
пеш				-121.3224	15 °	-121.322415 °	
DWR ID DWR_RD0524_01_s _ 2012_40							
Action/Comments							

Elderberries are blocking visibility and flood fight capability.

No Photos

LM Start	2.59	Rating **	М	Issue No.		41	
LM End	2.59	Issue Type +	Ma	Location *	LS		
Earthen Levee				GPS La	tituc	le/Longitude	
Category				Start		End	
Item	Vegetatio	n		37.9176	73 °	37.917673 °	
item				-121.3227	18 °	-121.322718 °	
DWR ID	DWR ID DWR_RD0524_01_s _ 2012_41						
Action/Comments							

Elderberries are blocking visibility and flood fight capability.

No Photos

* Location + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence LS : Land Side N/A: Not Applicable A : Acceptable
M : Minimally Acceptable
U : Unacceptable N : Not Inspected/Rated WS : Water Side C : Corrected A/W: Acceptable but Monitor & Maintain CR : Crown En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.59	Rating **	U	Issue No.		42		
LM End	2.59	Issue Type +	En	Location *	WS			
Category	Earthen L		GPS Latitude/Longitude					
Calegory				Start		End		
Item	Encroachments			37.917673 °		37.917673 °		
item				-121.32271	8 °	-121.322718 °		
DWR ID	DWR ID DWR_RD0524_01_s _ 2012_42							
Action/Comments								
Building								

Inspector Comments: Animal pens on landward slope and toe.





Looking west at animal pens on landside toe. (Fall 2012)

Photo 2 of 2: FA_2014_RD0524_107_42_20141020_00055.jpg



Looking at animal pens on landside slope and toe.

2.59	Rating **	М	Issue No.		7
2.59	Issue Type +	En	Location *		WS
Earthen L	evee		GPS La	atitud	e/Longitude
			Start		End
Encroach	Encroachments			31 °	37.917431 °
				80°	-121.322780 °
DWR_RD0	524_01_f _ 201	2_7			
	Action/	Comme	nts		
	2.59 Earthen L Encroach	2.59 Issue Type + Earthen Levee Encroachments DWR_RD0524_01_f _ 201	2.59 Issue Type + En Earthen Levee Encroachments DWR_RD0524_01_f _ 2012_7	2.59 Issue Type + En Location * Earthen Levee GPS La Start Start Encroachments 37.9174 -121.3227	2.59 Issue Type + En Location * Earthen Levee GPS Latitud



Looking southeast at unauthorized ramp on waterside slope.

Location + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence N/A: Not Applicable LS: Land Side A : Acceptable M : Minimally Acceptable N : Not Inspected/Rated WS : Water Side C : Corrected U : Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.60	Rating **	М	Issue No.		12	
LM End	2.60	Issue Type +	En	Location *		LS	
Earthen Levee				GPS Latitude/Longitude			
Category	alegory					End	
Item	Encroach	ments		37.9175	38 °	37.917538	0
item				-121.3227	57 °	-121.322757	0
DWR ID DWR_RD0524_01_f _ 2012_12							
Action/Comments							

Action/Commen

Pole

Inspector Comments: Old fence poles on landside shoulder and slope should be removed.



Looking northwest at fence poles on landside shoulder.

LM Start	2.60	Rating **	М	Issue No.		917		
LM End	2.60	Issue Type +	Ma	Location *		LS		
Earthen Levee				GPS Latitude/Longitude				
Category	ategory					End		
Item	Animal Co	ontrol		37.9174	75 °	37.917475 °		
пеш				-121.3228	08 °	-121.322808 °		
DWR ID DWR_RD0524_01_s _ 2012_917								
	Action/Comments							

Repair the levee slope damaged by livestock and prevent large animal access.

No Photos

LM Start	2.61	Rating **	M	Issue No.		153	
LM End	2.61	Issue Type +	En	Location *		LS	
Category			GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UC	P Field Study		37.9173	65 °	37.917365	0
пеш				-121.3227	79 °	-121.322779	0
DWR ID	DWR_RD0	524_01_f _ 201	4_153				

Action/Comments

Inspector Comments: FS_ID:21935

EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to determine type of abandonment for pipe at

his location.

FIELD_STRUCT_DESC: *Abandoned* Pump pad on LS shoulder with 4'X9' brick distribution box on WS slope. No pipe visible. 4'X9' brick

distribution box on LS toe. FS Date: 8/20/2013

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.61	Rating **	A/W	Issue No.	9			
LM End	2.61	Issue Type +	Ма	Location *	LS			
Category Earthen Levee			GPS Latitude/Longitude					
				Start		End		
Item	, Vegetation			37.9172	28 °	37.917228	0	
пеш				-121.3227	30 °	-121.322730	0	
DWR ID DWR_RD0524_01_s _ 2012_9								
	Action/Comments							

27.047229 0 27.047229 0

Remove the wild growth other than native grasses from the levee slopes.

LM Start	2.63	Rating **	М	Issue No.		185	
LM End	2.66	Issue Type +	Ма	Location *	WS		
Category Earthen Levee			GPS Latitude/Longitude				
Category				Start		End	
Item	Trim / Thi	n Trees		37.9171	52 °	37.916807	
item				-121.32258	32 °	-121.322069	
DWR ID DWR_RD0524_01_s _ 2014_185							
Action/Comments							

Thin trees to allow visibility of the ground and room to flood fight.

No Photos

No Photos

LM Start	2.65	Rating **	С	Issue No.	192			
LM End	2.65	Issue Type +	Ма	Location *	WS			
Category				GPS Latitude/Longitude				
Category			Start End					
ltom	DWR Ero	sion Survey		37.9166	50 °	37.916650	0	
пеш	Item			-121.3219	80 °	-121.321980	0	
DWR ID								
	Action/Comments							

Inspector Comments: 6/19/2014: The erosion was repaired.

08/13/2013: No significant change observed.

08/07/2012: The site was first reported in 2012 spring levee inspection

report. [2014 Site ID:RD0524U01RM43.23]

No Photos

* Location

LS: Land Side N/A: Not Applicable WS: Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected + Issue Type

Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.66	Rating **	М	Issue No.		43	
LM End	2.66	Issue Type +	Ma	Location *		LS	
Category Earthen Levee			GPS Latitude/Longitude				
Category			Start		End		
Item	Vegetation			37.91678	30 °	37.916780	0
пеш				-121.32209	95 °	-121.322095	0
DWR ID	DWR ID DWR_RD0524_01_s _ 2012_43						
Action/Comments							
Elderberrie	Elderberries are blocking visibility and flood fight capability.						

No Photos

Rating ** Issue No. LM Start 2.67 Μ 918 Issue Type + Ma Location * LS LM End 2.69 Earthen Levee GPS Latitude/Longitude Category Start End Trim / Thin Trees 37.916718° 37.916502° Item -121.322020 ° -121.321980 DWR RD0524 01 s 2012 918 DWR ID Action/Comments

No Photos

Rating ** Issue No. LM Start 2.67 U 920 WS LM End 2.67 Issue Type + En Location * Earthen Levee GPS Latitude/Longitude Category Start End 37.916698 Encroachments 37.916698° Item -121.322007 -121.322007

DWR ID DWR_RD0524_01_s _ 2012_920

Trim trees to at least five feet above ground level.

Action/Comments

Ramp



Looking southeast at unauthorized ramp on waterside slope.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side

A: Acceptable
M: Minimally Acceptable
U: Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.67	Rating **	С	Issue No.	919	
LM End	2.67	Issue Type +	Ма	Location *	WS	
Category Earthen Levee			GPS Latitude/Longitude			
Calegory				Start	End	
ltom	Item Erosion / Bank Caving			37.916650	°	37.916650 °
пеш				-121.32198	7 °	-121.321987 °
DWR ID	D DWR_RD0524_01_s _ 2012_919					
		Action/	Comme	nts		

Schedule repair of erosion site prior to the next inspection. Inspector Comments: LMA repaired erosion site.

No Photos

LM Start	2.69	Rating **	М	Issue No.		44	٦
LM End	2.80	Issue Type +	Ма	Location *		LS	
Cotogon/ Earthen Levee			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	Trim / Thin Trees			37.9164	18 °	37.915142	э
item				-121.3219	63 °	-121.323018	э
DWR ID	ID DWR_RD0524_01_s _ 2012_44						

Action/Comments

Trim trees over roadway to at least 12 feet above ground level. Inspector Comments: Trim over hanging trees at least 12 feet above ground level.

Photo 1 of 1 : FA_2014_RD0524_107_44_20141020_00056.jpg



Looking north at dense trees overhanging levee crown.

LM Start	2.71	Rating **	М	Issue No.	21		
LM End	2.71	Issue Type +	Ma	Location *	WS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	Erosion /	Bank Caving		37.91622	24 °	37.916224 °	
пеш				-121.32211	15 °	-121.322115 °	
DWR ID	/R ID DWR_RD0524_01_f _ 2013_21						
	Action/Comments						

Schedule repair of erosion site prior to the next inspection. Inspector Comments: Large erosion around irrigation pipe.



Looking at erosion around irrigation pipe on waterward slope.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy

M: Minimally Acceptable C: C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating

A: Acceptable M: N: Not Inspected/Rated Ma: Maintenance Deficiancy Ob: Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.71	Rating **	М	Issue No.	21 (cont)		
LM End	2.71	Issue Type +	Ма	Location *	WS		
Category	Earthen L	GPS Latitude/Longitude					
Calegory			Start		End		
ltom	Erosion / Bank Caving			37.91622	24 °	37.916224 °	
пеш	Item				15 °	-121.322115 °	
DWR ID	DWR_RD0524_01_f _ 2013_21						
Action/Comments							

Schedule repair of erosion site prior to the next inspection. Inspector Comments: Large erosion around irrigation pipe.

Photo 2 of 2: FA_2014_RD0524_107_21_20141020_00034.jpg

Looking east at erosion around irrigation pipe on waterward slope.

LM Start	2.73	Rating **	A/W	Issue No.	264		
LM End	2.73	Issue Type +	Ма	Location *	LS		
Category	Earthen L		GPS Latitude/Longitude				
Calegory				Start		End	
Item	Trim / Thin Trees			37.9159	68 °	37.915968 °	
пеш				-121.3222	75 °	-121.322275 °	
DWR ID DWR_RD0524_01_s _ 2012_264							
Action/Comments							

Trim trees over roadway to at least 12 feet above ground level.

No Photos

LM Start	2.73	Rating **	М	Issue No.	60		
LM End	2.77	Issue Type +	Ma	Location *	LS		
Category	Earthen L	GPS Latitude/Longitude					
Calegory		Start		End			
Item	Trim / Thin Trees			37.91574	7°	37.915492	0
item		-121.32247	'0 °	-121.322639	0		
DWR ID	DWR_RD0	524_01_s _ 201	12_60				
Action/Comments							

Trim trees to at least five feet above ground level.

No Photos

* Location
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated M : Maintenance Deficiancy
C : Corrected Ob : Design & System Obsolescence
U : Unacceptable A/W : Acceptable but Monitor & Maintain En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.75	Rating **	М	Issue No.	154		
LM End	2.75	Issue Type +	En	Location *	LS		
Category	ental	GPS Latitude/Longitude					
Calegory				Start		End	
Item	DWR UCIP Field Study				°	37.915698	0
пеш				-121.32250°	0	-121.322501	0
DWR ID	DWR_RD0	524_01_f _ 201					

Action/Comments

Inspector Comments: FS_ID:18085

EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: No permit identified for crossing. Unknoww use.

Pipe should be removed.

FIELD_STRUCT_DESC: 3-inch galvanized iron pipe through the levee

0.3 feet below the crown. Valve on the landward shoulder.

FS Date: 8/20/2013 3:28:19 PM

LM Start	2.77	Rating **	A/W	Issue No.	70			
LM End	2.77	Issue Type +	Ma	Location *	LS			
Category	Earthen L	.evee	GPS Latitude/Longitude					
Calegory			Start		End			
Item	Encroachments			37.9155	03 °	37.915503 °		
пеш			-121.3227	45 °	-121.322745 °			
DWR ID	DWR_RD0524_01_s _ 2012_70							
Action/Comments								

Tree or limb

Inspector Comments: Broken tree branch.

No Photos

No Photos

LM Start	2.80	Rating **	M	Issue No.	126		
LM End	2.80	Issue Type +	oe + Ma Location * WS			WS	
Category	Suppleme	GPS Latitude/Longitude					
Calegory		Start		End			
Item	DWR Erosion Survey			37.8789	20 °	37.878920	0
пеш				-121.3326	70°	-121.332670	0
DWR ID							
Action/Comments							

Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: Larger trees are at the levee shoulder, and an irrigation pump station is next to the erosion site. [2014 Site

ID:RD0524U01RM46.06]



Front view of the erosion.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy

M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

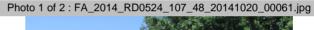
LM Start	2.81	Rating **	М	Issue No.	921		
LM End	2.81	Issue Type +	En	Location *	WS		
Category	Catagory Earthen Levee				atitud	le/Longitude	
Calegory	gory			Start		End	
Item	Encroachments			37.9151	25 °	37.915125°	
пеш			-121.323227 °		-121.323227 °		
DWR ID	DWR_RD0	524_01_s _ 201	12_921				
		Action/	Comme	nts			
Prunings							

No Photos

LM Start	2.82 Rating ** U			Issue No.	48		
LM End	2.82	Issue Type +	Ma	Location *	LS		
Category	Earthen L		GPS La	atitud	le/Longitude		
Calegory				Start		End	
Item	Vegetation			37.9150	22 °	37.915022 °	
item			-121.3234	43 °	-121.323443 °		
DWR ID DWR_RD0524_01_s _ 2012_48						·	
Action/Comments							

Elderberries are blocking visibility and flood fight capability.

LM Start	2.82	Rating **	U	Issue No.	48 (cont)
LM End	2.82	Issue Type +	Ma	Location *	LS





Looking south at dense elderberry on landside slope.(Spring 2012)



Looking south at elderberry on landside slope.(Spring 2011)

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.83	Rating **	U	Issue No.		91		
LM End	2.83	Issue Type +	Ma	Location *		LS		
Category Earthen Levee				GPS La	atitud	le/Longitude		
Calegory			Start		End			
Item	Trim / Thi	n Trees		37.9150	63 °	37.915063	0	
item				-121.323585 °		-121.323585	0	
DWR ID DWR_RD0524_01_s _ 2012_91								
	Action/Comments							

Thin trees to allow visibility of the ground and room to flood fight.



Looking southwest at dense vegetation on landside slope.

LM Start	2.88	Rating **	U	Issue No.	49			
LM End	2.88	Issue Type +	Ma	Location *	LS			
Cotagonia Earthen Levee				GPS Latitude/Longitude				
Category			Start		End			
Item	Vegetatio	n		37.914427 °		37.914427	0	
пеш		-121.324198 °		° -121.324198				
DWR ID DWR_RD0524_01_s _ 2012_49								
Action/Comments								

Elderberries are blocking visibility and flood fight capability.



Looking northwest at elderberry on landside slope.

2.93	Rating **	U	Issue No.		50		
2.95	Issue Type +	Ma	Location *		LS		
Category Earthen Levee			GPS La	atitud	e/Longitude		
			Start		End		
Encroachi	ments		37.9137	67 °	37.913503 °		
			-121.3244	27 °	-121.324488 °		
DWR ID DWR_RD0524_01_s _ 2012_50							
Action/Comments							
	2.95 Earthen L Encroach	2.95 Issue Type + Earthen Levee Encroachments DWR_RD0524_01_s_201	2.95 Issue Type + Ma Earthen Levee Encroachments DWR_RD0524_01_s _ 2012_50	2.95 Issue Type + Ma Location * Earthen Levee GPS La Start Encroachments 37.9137 -121.3244. DWR_RD0524_01_s _ 2012_50	2.95 Issue Type + Ma Location * Earthen Levee GPS Latitud Start Encroachments 37.913767 ° -121.324427 ° DWR_RD0524_01_s _ 2012_50		

Prunings



Looking southwest at prunings on landside slope.

* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

** Rating
A: Acceptable
N: Not Inspected/Rated
M: Ninimally Acceptable
C: Corrected
D: Unacceptable
A/W: Acceptable but Monitor & Maintain

** Rating
A: Issue Type
Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

							_
LM Start	2.96	Rating **	M	Issue No.	51		
LM End	2.96	Issue Type +	Ma	Location *	LS		
Category	Catagoni Earthen Levee			GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Trim / Thi	Trim / Thin Trees			15 °	37.913415	0
item		-121.3245	03 °	-121.324503	0		
DWR ID	DWR ID DWR_RD0524_01_s _ 2012_51						
		Action/	Comme	nts			

No Photos

Rating ** Issue No. LM Start 2.96 U 193 WS 2.96 Issue Type + Ma Location * LM End Supplemental GPS Latitude/Longitude Category Start End **DWR Erosion Survey** 37.913010° 37.913010° Item -121.324490 ° -121.324490 ° DWR ID

Action/Comments

Trim trees to at least five feet above ground level.

Inspector Comments: 6/19/2014: No significant change observed.

08/13/2013: No significant change observed.

08/07/2012: The site was first reported in 2012 spring levee inspection report. [2014 Site ID:RD0524U01RM43.52]



erosion.

No Photos

LM Start	2.98	Rating **	M	Issue No.	155		
LM End	2.98	Issue Type +	En	Location *	WS		
Category	GPS Latitude/Longitude						
Calegory				Start		End	
Item	DWR UC	DWR UCIP Field Study			1 °	37.913101	0
пеш				-121.324500		-121.324500	0
DWR ID	DWR_RD0	524_01_f _ 201	4_155		·		

Action/Comments

Inspector Comments: FS_ID:18089

EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: Review crossing with inspector as records indicate that this should be an 8-inch pipe through levee 3.0 feet below crown, pump on landward side. Siphon breaker on the waterward slope.

Originally included in the 1964 O&M manual.

FIELD_STRUCT_DESC: 16-inch wrapped steel storm discharge pipe through the levee 1.5-feet below the crown. Pump on steel pile

structure at drainage canal off LS toe.

FS Date: 8/20/2013

Front view of the	e
	Т

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	3.04	Rating **	М	Issue No.	924			
LM End	3.04	Issue Type +	Ма	Location *	LS			
Category Earthen Levee				GPS La	atitud	le/Longitude		
Category		Start		End				
Item	Animal Co	ontrol		37.9121	63 °	37.912163		
пеш			-121.3247	02 °	-121.324702			
DWR ID DWR_RD0524_01_s _ 2012_924								
	Action/Comments							

Repair the levee slope damaged by livestock and prevent large animal access.

Rating ** M Issue No. 925 LM Start 3.10 Location * Issue Type + LS LM End 3.12 Ma Earthen Levee GPS Latitude/Longitude Category End **Animal Control** 37.911382° 37.911088° Item -121.324928 ° -121.325113 ° DWR RD0524 01 s 2012 925 DWR ID

Action/Comments

Exterminate rodents and backfill and compact or grout burrows.

No Photos

No Photos

Rating ** Issue No. С LM Start 3.23 3.31 Issue Type + Location * WS LM End Ма Supplemental GPS Latitude/Longitude Category Start End **DWR Erosion Survey** 37.908544° 37.908544 ° -121.324894 -121.324894 DWR ID Action/Comments

Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: New erosion was found at the levee toe. Trees are present. 08/07/2012: The site has been repaired. Protecting riprap revetment has been placed at the levee shoulder and slope, but minor erosions are visible at the levee toe.

08/23/2011: Sloughing rip rap is visible on the site [2014 Site ID:RD0524U01RM43.83]

No Photos

* Location LS: Land Side N/A: Not Applicable WS : Water Side

A : Acceptable M : Minimally A

: Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W: Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	3.29	Rating **	U	Issue No.		5	
LM End	3.31	Issue Type + Ma		Location *		WS	
Catagory	Category			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR Ero	sion Survey		37.90809	90°	37.908090 °	
пеш			-121.32509	90 °	-121.325090 °		
DWR ID							

Action/Comments

Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: The levee toe seems to have been protected by river rocks and vegetation on site. [2014 Site ID:RD0524U01RM43.86]



View from upstream of the erosion.

LM Start	3.30	Rating **	Rating ** A/W Issue No.		186	
LM End	3.30	Issue Type +	Ма	Location *		WS
Category Earthen Levee				GPS Latitude/Longitude		
Calegory						End
Item	Trim / Thi	rim / Thin Trees			51 °	37.908551 °
item				-121.3253	81 °	-121.325381 °
DWR ID DWR_RD0524_01_s _ 2014_186						
		A otion /	Commo	nto		

Action/Comments

Trim trees to at least five feet above ground level.

No Photos

LM Start	3.33	Rating **	A/W	Issue No.		926	
LM End	3.35	Issue Type +	Ma	Location *		LS	
Catagory	Category Earthen Levee			GPS Latitude/Longitude			
Calegory		Start		End			
Item	Trim / Thi	n Trees		37.9081	58 °	37.907872	0
пеш				-121.3254	18 °	-121.325443	0
DWR ID	DWR_RD0	524_01_s _ 20 ²	12_926				
		Action/	Comme	nts			

Trim trees to at least five feet above ground level.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	3.37	Rating **	A/W	Issue No.	52	
LM End	3.40	Issue Type +	Ma	Location *		LS
Category	Earthen Levee			GPS Latitude/Longitude		
Calegory			Start		End	
Item	Trim / Thi	n Trees		37.9076	45 °	37.907157 °
пеш				-121.3254	42 °	-121.325408 °
DWR ID	DWR_RD0	524_01_s _ 201	12_52			·
Action/Comments						

Trim trees to at least five feet above ground level.

No Photos

Rating ** Issue No. LM Start 3.38 U 156 Issue Type + En Location * LS LM End 3.38 Supplemental GPS Latitude/Longitude Category Start End DWR UCIP Field Study 37.907504° 37.907504° Item -121.325420° -121.325420 DWR RD0524 01 f 2014 156 DWR ID

Action/Comments

Inspector Comments: FS_ID:18091

EP_NO: N/A

Repair Type: Urgent Crossing Status: Found

UCIP Comments: Extensive erosion on LS toe at distribution box due to failure of box/pipe connection. Erosion on LS slope do to recently repaired leak at gate valve.

FIELD_STRUCT_DESC: 14-inch steel irrigation pipe through the levee 7-feet below the crown, pump house on the waterward slope. Gate valve on the LS slope and a 4'X4' brick distribution box at the LS toe. Originally included in the 1964 O&M manual.

FS Date: 8/20/2013

Landscaping

No Photos

LM Start	3.38	Rating **	U	Issue No.		92	
LM End	3.39	Issue Type +	En	Location *		LS	
Catagory	Earthen Levee				GPS Latitude/Longitude		
Category				Start		End	
Item	Vegetatio	n		37.9074	07 °	37.907177°	
пеш					35 °	-121.325392 °	
DWR ID DWR_RD0524_01_s _ 2012_92						·	
Action/Comments							

Photo 1 of 1: FA_2014_RD0524_107_92_20141020_00087.jpg



Looking southwest at dense landscaping on landside slope.

* Location + Issue Type A : Acceptable M : Minimally A N/A: Not Applicable Ma: Maintenance Deficiancy LS: Land Side N : Not Inspected/Rated WS : Water Side : Minimally Acceptable C : Corrected Ob : Design & System Obsolescence U : Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	3.39	Rating **	М	Issue No.		53	_	
LM End	3.45	Issue Type +	Ма	Location *	WS			
Catagory	Category Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End		
Item	Animal Co	ontrol		37.907283	°	37.906503	0	
пеш				-121.325432	0	-121.325002	0	
DWR ID	DWR_RD0	524_01_s _ 201	2_53					
		Action/Comments						

Exterminate rodents and backfill and compact or grout burrows.

No Photos

LM Start	3.43	Rating **	U	Issue No.		54	
LM End	3.49	Issue Type +	Ма	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
Category			Start		End		
Item	Trim / Thi	n Trees		37.9067	47 °	37.906192 °	
пеш				-121.3252	48 °	-121.324543 °	
DWR ID	DWR_RD0	524_01_s _ 201	2_54				
		A - 1' /	<u> </u>	- 1 -			

Action/Comments

Trim and thin trees to allow visibility of the ground and room to flood fight.

Photo 1 of 1: FA_2014_RD0524_107_54_20141020_00065.jpg



Looking northwest at dense vegetation on landside slope.

LM Start	3.45	Rating **	М	Issue No.	56		
LM End	3.45	Issue Type +	Ma	Location *	LS		
Category	evee	GPS Latitude/Longitude					
Calegory				Start		End	
Item	Encroach	Encroachments			40 °	37.906540 °	
item				-121.3250	15 °	-121.325015 °	
DWR ID	DWR ID DWR_RD0524_01_s _ 2012_56						
Action/Comments							

Material

Inspector Comments: Broken concrete pipes



Looking southwest at concrete pipes on landside toe.

Location + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence LS : Land Side N/A: Not Applicable A : Acceptable M : Minimally Acceptable N : Not Inspected/Rated WS : Water Side C : Corrected U : Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	3.47	Rating **	U	Issue No. 93			
LM End	3.47	Issue Type +	Ма	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory			Start		End		
Item	Trim / Thin Trees			37.9062	65 °	37.906265 °	
item			-121.3246	43 °	-121.324643 °		
DWR ID	DWR_RD0524_01_s _ 2012_93						
Action/Comments							

Trim and thin trees to allow visibility of the ground and room to flood fight.



Looking northwest at low hanging tree branches on landside slope and toe.

LM Start	3.51	Rating **	М	Issue No.	177			
LM End	3.51	Issue Type +	Ма	Location *	LS			
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Category			Start		End			
Item	Encroach	ments		37.9059	94 °	37.905994°		
пеш				-121.3241	94 °	-121.324194 °		
DWR ID	DWR_RD0524_01_f _ 2014_177							
	Action/Comments							

Tree or limb

Inspector Comments: Dead tree on landward toe.

No Photos

LM Start	3.53	Rating **	М	Issue No.	265		
LM End	3.53	Issue Type +	En	Location *	LS		
Category Earthen Levee			GPS La	atitud	e/Longitude		
Calegory			Start		End		
Item	Encroach	ments		37.9055	52 °	37.905552 °	
item				-121.3238	47 °	-121.323847 °	
DWR ID	DWR_RD0	524_01_s _ 201					
Action/Comments							

Ramp

Inspector Comments: Unauthorized ramp on landside slope.



Looking southeast at unauthorized ramp on landside slope and toe.

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	3.54	U	Issue No.		57		
LM End	3.64	Issue Type +	Ma	Location *	LS		
Category Earthen Levee			GPS La	atitud	le/Longitude		
Calegory				Start		End	
Item	Trim / Thi	n Trees		37.9056	38 °	37.904430 °	
item				-121.3238	92 °	-121.324570 °	
DWR ID	DWR_RD0524_01_s _ 2012_57						
Action/Comments							

Trim and thin trees to allow visibility of the ground and room to flood fight.



Looking south at dense trees on landward slope.

LM Start	3.55 Rating ** M			Issue No.		55		
LM End	3.57 Issue Type + Ma			Location *		WS		
Supplemental				GPS Latitude/Longitude				
Category				Start		End		
Itom	DWR Erosion Survey			37.9046	30°	37.904630	0	
Item				-121.3236	10°	-121.323610	0	
DWR ID								

Action/Comments

Inspector Comments: 6/19/2014: The previous erosion was repaired. New erosion was found below the repaired levee slope.

08/13/2013: No significant change observed.

08/07/2012: The levee toe has been cut off along a 150 ft. long river stretch. The erosion is located just upstream of a river bend. [2014 Site ID:RD0524U01RM44.13]

Photo 1 of 1 : SJR2014_RD0524U01RM44.13_1.jpg
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The second secon
A LONG THE RESERVE OF THE PARTY
View of the nemained site

View of the repaired site.

LM Start	3.65	Rating **	М	Issue No.		124	
LM End	3.65	Issue Type +	En	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Category			Start		End		
Item	Vegetation			37.90437	'5 °	37.904375°	
item				-121.32461	5 °	-121.324615 °	
DWR ID	DWR_RD0	524_01_f _ 201	2_124			·	

Action/Comments

Landscaping

Inspector Comments: Landowner planted cactus on landside toe.



Looking west at cactus on landside toe.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy

M: Minimally Acceptable C: C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating

A: Acceptable M: N: Not Inspected/Rated Ma: Maintenance Deficiancy Ob: Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

3.68	Rating **	M	Issue No. 58		58	
3.68	Issue Type +	Ма	Location *	WS		
Category Earthen Levee			GPS La	titud	e/Longitude	
			Start		End	
Slope Stability			37.9041	13 °	37.904113 °	
		-121.3250	80 °	-121.325080 °		
DWR ID DWR_RD0524_01_s _ 2012_58						
	3.68 Earthen L Slope Sta	3.68 Issue Type + Earthen Levee Slope Stability	3.68 Issue Type + Ma Earthen Levee Slope Stability	3.68 Issue Type + Ma Location * Earthen Levee GPS La Start Slope Stability 37.9041 -121.3250	3.68 Issue Type + Ma Location * Earthen Levee GPS Latitud	

Action/Comments

Repair the levee slope damaged by foot traffic and prevent access where possible.

Inspector Comments: Landowner cut steps into waterside slope.



Looking southeast steps cut into waterside slope.

LM Start	3.80 Rating ** M Issue No. 92				927		
LM End	3.80	Issue Type +	Ma	Location *	LS		
Catagoria Earthen Levee			GPS La	atitud	le/Longitude		
Category				Start		End	
Itom	Trim / Thin Trees			37.9026	45 °	37.902645 °	
Item				-121.3263	40 °	-121.326340 °	
DWR ID	DWR_RD0524_01_s _ 2012_927						
		Action/	Comma	nte			

Action/Comments

Trim trees to at least five feet above ground level.

No Photos

LM Start	3.82	Rating **	М	Issue No.	59			
LM End	3.82	Issue Type +	Ma	Location *	LS			
Category	Earthen L	GPS La	tituc	le/Longitude				
Calegory		Start		End				
Trim / Thin Trees			37.9024	7°	37.902417	٥		
Item		-121.32648	32 °	-121.326482	0			
DWR ID	DWR_RD0	524_01_s _ 201	12_59					
Action/Comments								

Trim trees to at least five feet above ground level.

No Photos

* Location LS : Land Side N/A: Not Applicable WS : Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	3.82	Rating **	М	Issue No.		157		
LM End	3.82 Issue Type + En Loc		3.82 Issue Type + En Location *		Location *			
Category				GPS Latitude/Longitude				
Calegory		Start		End				
Item	DWR UC	P Field Study		37.90237	1°	37.902371	0	
item				-121.32644	o °	-121.326440	0	
DWR ID	DWR_RD0	524_01_f _ 201	4_157					

Action/Comments

Inspector Comments: FS_ID:22725

EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: No permit identified for this crossing.

FIELD STRUCT DESC: 8-inch steel irrigation pipe through the levee 0feet below the crown. Pipe integrated into steel cattelguard style crossing. Slant pump and butterfly valve at concrete foundation on WS

slope. Filter plant, vents, and butterfly valves on LS toe.

FS Date: 8/20/2013

LM Start	3.82	Rating **	М	Issue No.	266				
LM End	3.82	Issue Type +	En	Location *	CR				
Category Earthen Levee				GPS Latitude/Longitude					
Category	egory					End			
Item	Encroach	Encroachments			65 °	37.902365 °	-		
item				-121.3264	53 °	-121.326453 °	-		
DWR ID DWR_RD0524_01_s _ 2012_266]		
	Action/Comments								

Equipment

Inspector Comments: Landowner installed water filter piping system without permit.

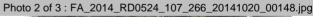
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Photo 1 of 3: FA_2014_RD0524_107_266_20141020_00147.jpg

Looking south at unauthorized irrigation pipe across levee and water filtration system at landside toe.

Rating ** Issue No. 3.82 266 (cont) LM Start 3.82 Issue Type + Location * CR LM End





Looking south unauthorized pvc irrigation pipe across the levee crown.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	3.82	Rating **	М	Issue No. 266 (c		266 (cont)		
LM End	3.82	Issue Type +	En	Location *	CR			
Category Earthen Levee				GPS Latitude/Longitude				
Calegory	egory				Start			
ltom	Encroach	ments		37.9023	65 °	37.902365	0	
пеш	Item				53 °	-121.326453	0	
DWR ID DWR_RD0524_01_s _ 2012_266								
	Action/Comments							

Equipment

Inspector Comments: Landowner installed water filter piping system without permit.



Looking west at water filtration system on landside toe.

LM Start	3.82	Rating **	М	Issue No.		158
LM End	3.82 Issue Type + En Location *		ue Type + En		Location * CR	
Category	ental	GPS Latitude/Longitude				
Calegory			Start		End	
Item	DWR UC	P Field Study		37.90236	1 °	37.902361 °
пеш			-121.32644	3°	-121.326443 °	
DWR ID	DWR_RD0	524_01_f _ 201	4_158			·

Action/Comments

Inspector Comments: FS_ID:18307 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Appears abandoned and if so should be done so properly. Evidence of severe internal corrosion in concrete distribution

box at LS toe.

FIELD_STRUCT_DESC: 12-inch concrete encased pipe through the levee 10.5 feet below the crown, pump and gate valve in pump house on the waterward slope. 6'X6' Concrete distribution box on the landward toe. Two concrete cutoff walls. Service pole at the landward toe.

Originally included in the 1964 O&M manual.

FS Date: 8/20/2013

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	3.84	Rating **	М	Issue No.		928		
LM End	3.85	Issue Type +	Ma	Location *		LS		
Category Earthen Levee				GPS Latitude/Longitude				
Calegory	Category			Start		End		
Item	Trim / Thin Trees			37.90215	55 °	37.902002 °		
пеш				-121.32652	23 °	-121.326550 °		
DWR ID	DWR_RD0	524_01_s _ 201	12_928					
Action/Comments								
Trim trees	Trim trees to at least five feet above ground level.							

No Photos

Rating ** Issue No. LM Start 3.89 Μ 187 WS Issue Type + Ma Location * LM End 3.89 Earthen Levee GPS Latitude/Longitude Category Start End Encroachments 37.901447° 37.901447 ° Item -121.326500° -121.326500 DWR RD0524 01 s 2014 187 DWR ID Action/Comments

Action/Comm

Tree or limb

Inspector Comments: Tree limb on waterward shoulder.



Looking northeast at tree limb on waterward slope.

LM Start	3.89	Rating **	М	Issue No.	62			
LM End	4.01	Issue Type +	En	Location *	LS			
Category Earthen Levee				GPS Latitude/Longitude				
Calegory		Start		End				
Item	Encroach	ments		37.9013	75 °	37.899745°		
пеш				-121.3265	07°	-121.326630 °		
DWR ID DWR_RD0524_01_s _ 2012_62								
Action/Comments								

Equipment



Looking south at northend of equipment stored at landward slope and toe.

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	3.89	Rating **	М	Issue No.	62 (cont)			
LM End	4.01	Issue Type +	En	Location *	LS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Category			Start		End			
Item	Encroachments			37.901375 °		37.899745	0	
пеш		-121.326507 °		-121.326630	0			
DWR ID	DWR_RD0	524_01_s _ 201	12_62					
		Action/	Comme	nts				
Equipmen	t							

Photo 2 of 2 : FA_2014_RD0524_107_62_20141020_00071.jpg



Looking upstream at equipment on landside shoulder

LM Start	3.91	Rating **	U	Issue No.		95	
LM End	3.94	Issue Type +	En	Location *	LS		
Catagory	Earthen L		GPS Latitude/Longitude				
Category			Start		End		
Itom	Encroachments			37.9011	47 °	37.900735°	
Item				-121.3264	53 °	-121.326425 °	
DWR ID	DWR_RD0524_01_f _ 2013_95						
Action/Comments							

Equipment

Inspector Comments: Landowner is storing equipment on landward shoulder and landward toe.

Photo 1 of 3: FA_2014_RD0524_107_95_20141020_00090.jpg	j

Looking south at farm equipment stored on landward shoulder and toe.

LM Start	3.91	Rating **	U	Issue No.	95 (cont)
LM End	3.94	Issue Type +	En	Location *	LS

Photo 2 of 3: FA_2014_RD0524_107_95_20141020_00091.jpg



Looking north at farm equipment stored on landward shoulder.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	3.91	Rating **	U	Issue No.		95 (cont)	
LM End	3.94	Issue Type +	En	Location *		LS	
Catagory	Earthen L	GPS Latitude/Longitude					
Category		Start		End			
Itom	Encroach	ments		37.90114	47 °	37.900735	٥
Item				-121.3264	53 °	-121.326425	0
DWR ID	DWR_RD0524_01_f _ 2013_95						
Action/Comments							

Equipment

Inspector Comments: Landowner is storing equipment on landward shoulder and landward toe.

Photo 3 of 3 : FA_2014_RD0524_107_95_20141020_00092.jpg



Looking west at farm equipment stored at landward toe.

LM Start	3.92	Rating **	М	Issue No.	94			
LM End	3.92	Issue Type +	Ма	Location *		WS		
Category	Earthen L		GPS Latitude/Longitude					
Calegory			Start		End			
Item	Vegetatio	n		37.900952 °		37.900952 °		
item			-121.3264	43 °	-121.326443 °			
DWR ID	DWR_RD0524_01_s _ 2012_94							
Action/Comments								

Remove the wild growth other than native grasses from the levee slopes.

Inspector Comments: Remove cactus

Photo 1 of 1: FA_2014_RD0524_107_94_20141020_00089.jpg



Looking southeast at cactus on waterside slope.

LM Start	3.93	Rating **	M	Issue No.	83		
LM End	3.93	Issue Type +	Ма	Location *	LS		
Category	Earthen L	GPS La	titud	e/Longitude			
Calegory				Start		End	
Item	Trim / Thi	n Trees		37.90085	64 °	37.900854	0
item				-121.32643	88 °	-121.326438	0
DWR ID	DWR_RD0	DWR_RD0524_01_s _ 2012_83					
		Action/	Comme	nte			

Trim trees to at least five feet above ground level.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	4.06	Rating **	U	Issue No.	101		
LM End	4.06	Issue Type +	En	Location *	LS		
Cotogony	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory	Category			Start		End	
Item	Encroachments			37.8990	27 °	37.899027	0
item		-121.3269	82 °	-121.326982	0		
DWR ID	DWR_RD0	524_01_s _ 201	12_101				
		Action/	Comme	nts			
Ramp Inspector Comments: Unauthorized ramp. Ramp does not meet Title 23 standard.							



Looking west at unathorized ramp on landside slope.

LM Start	4.07	Rating **	М	Issue No.	61	
LM End	4.07	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Trim / Thin Trees			37.8989	25 °	37.898925 °
				-121.3270	15 °	-121.327015 °
DWR ID	DWR_RD0524_01_s _ 2012_61					
Action/Comments						

Trim trees to at least five feet above ground level.

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	4.07	Rating **	М	Issue No.		159		
LM End	4.07	Issue Type +	En	Location *	LS			
Category	Suppleme	upplemental			GPS Latitude/Longitude			
Calegory	Jory		Start		End			
Item	DWR UC	IP Field Study	,	37.89885	53 °	37.898853	0	
пеш				-121.32704	19 °	-121.327049	0	
DWR ID	DWR_RD0	524_01_f _ 201	4_159					

Action/Comments

Inspector Comments: FS_ID:18314

EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Appears abandoned and if so should be done so

properly.

FIELD_STRUCT_DESC: 8-inch concrete encased pipe through the levee 9.5-feet below crown, pump and gate valve in pump house on the waterward slope. Slide gate in 42-inch corrugated metal pipe riser on the waterward slope. Brick standpipe at the toe of the landward slope. 1.5-inch galvanized iron electrical conduit through the levee 3-feet below the crown at the same location. Originally included in the 1964 O&M manual.

FS Date: 8/20/2013

LM Start	4.08	Rating **	М	Issue No.	64		
LM End	4.13	Issue Type +	Ма	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
				Start		End	
Item	Animal Control			37.8988	32 °	37.898090 °	
пеш					92 °	-121.327457 °	
DWR ID	DWR_RD0	2_64					
Action/Comments							

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

No Photos

No Photos

* Location

LS: Land Side N/A: Not Applicable WS: Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	4.13 Rating ** M		М	Issue No.		108	
LM End	4.13	Issue Type +	Ma	Location *		LS	
Catagonia Earthen Levee						le/Longitude	
Category				Start		End	
Item	Slope Sta	bility		37.8980	35 °	37.898035	
пеш				-121.3274	47 °	-121.327447	
DWR ID DWR_RD0524_01_s _ 2012_108						·	
Action/Comments							

Repair slope instability.



Looking southwest at caving slope on landside of levee.

Photo 1 of 1: FA_2014_RD0524_107_110_20141020_00104.jpg

LM Start	4.19	Rating **	М	Issue No.		110
LM End	4.19	Issue Type +	En	Location *	LS	
Category	Earthen L	evee		GPS La	titud	le/Longitude
Category				Start		End
Item	Encroach	ments		37.8971	03 °	37.897103 °
пеш				-121.3278	95 °	-121.327895 °
DWR ID DWR_RD0524_01_s _ 2012_110						
Action/Comments						

Ramp

Inspector Comments: Two unauthorized ramps on landward slope.



Looking southwest at an unauthorized ramp on landside slope.

LM Start	4.19	Rating **	A/W	Issue No.		109	
LM End	4.19	Issue Type + Ma		4.19 Issue Type + Ma Location *		WS	
Category	nterior Drainage & Piping			GPS Latitude/Longitude			
Calegory	Systems			Start		End	
Item	Metal Pipe	Metal Pipes		37.89711	3°	37.897113	
пеш				-121.32789	95 °	-121.327895	
DWR ID	DWR_RD0	524_01_s _ 201	2_109				

Action/Comments

Inspector Comments: Landowner has temporarily repaired pipe with tape. Pipe should be repaired to stop further damage to the levee. Landowner repaired steel pipe, but pvc piping is still causing damage to waterward slope.



Looking east at repaired pipe on waterward slope.

* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

** Rating

A : Acceptable N : Not Inspected/Rated M : Maintenance Deficiancy

C : Corrected Ob : Design & System Obsolescence

U : Unacceptable A/W : Acceptable but Monitor & Maintain

** Rating

A : Acceptable M : Monitor & Maintain

C : Corrected Ob : Design & System Obsolescence

En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	4.19 Rating ** A/W			Issue No.		109 (cont)		
LM End	4.19	Issue Type +	Ma	Location *		WS		
Category	Interior Drainage & Piping Systems			Cotogony		GPS La	atitud	le/Longitude
Calegory				Start		End		
Item	Metal Pipe	es		37.8971	13 °	37.897113		
пеш				-121.3278	95 °	-121.327895		
DWR ID	DWR_RD0	12_109						
Action/Comments								

Inspector Comments: Landowner has temporarily repaired pipe with tape. Pipe should be repaired to stop further damage to the levee. Landowner repaired steel pipe, but pvc piping is still causing damage to waterward slope.

LM Start	4.19	Rating **	A/W	Issue No.	109 (cont)
LM End	4.19	Issue Type +	Ma	Location *	WS



Looking east at damaged pipe on waterside slope. (Spring 2012)

Photo 3 of 5: FA_2014_RD0524_107_109_20141020_00101.jpg



Looking northeast at overview of irrigation system on waterside slope.

Photo 4 of 5: FA_2014_RD0524_107_109_20141020_00102.jpg

LM Start	4.19	Rating **	A/W	Issue No.	109 (cont)
LM End	4.19	Issue Type +	Ma	Location *	WS



Looking east at irrigation system on waterside slope.

*Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

**Rating

A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable CR : Crown

**Rating

A : Acceptable N : Not Inspected/Rated Ma : Maintenance Deficiancy Ob : Design & System Obsolescence

U : Unacceptable A/W : Acceptable but Monitor & Maintain Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	4.19	Rating **	A/W	Issue No.		109 (cont)	
LM End	4.19	Issue Type +	Ma	Location *		WS	
Category	ainage & Pipi	GPS Latitude/Longitude					
Calegory	Systems		Start		End		
Item	Metal Pipe	es		37.8971	13 °	37.897113	
пеш				-121.3278	95 °	-121.327895	
DWR ID	DWR_RD0524_01_s _ 2012_109						
	Action/Comments						

Inspector Comments: Landowner has temporarily repaired pipe with tape. Pipe should be repaired to stop further damage to the levee. Landowner repaired steel pipe, but pvc piping is still causing damage to waterward slope.



Looking east at irrigation system damaging waterside toe.

LM Start	4.20	Rating **	М	Issue No.		160	
LM End	4.20	Issue Type +	En	Location *	WS		
Category	ental	GPS Latitude/Longitude					
Calegory				Start		End	
Item	DWR UC	P Field Study		37.8971	18 °	37.897118 °	
item				-121.3279	0°	-121.327910 °	
DWR ID DWR_RD0524_01_f _ 2014_160							
	Action/Comments						

Inspector Comments: FS_ID:18318

EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Small leak on WS slope causing minor erosion on

WS slope.

FIELD_STRUCT_DESC: 12-inch steel irrigation pipe through the levee 4.5 feet below the crown, pumphouse and gate valve on the waterward slope. 36-inch concrete standpipe, power pole, and meter on LS toe.

Originally included in the 1964 O&M manual.

FS Date: 8/23/2013

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start 4.21 Rating ** Μ Issue No. 161 Issue Type + Location * WS 4.21 En LM End Supplemental GPS Latitude/Longitude Category Start End DWR UCIP Field Study 37.897074° 37.897074 ° Item -121.327926 ° -121.327926 ° DWR ID DWR_RD0524_01_f _ 2014_161 Action/Comments

Inspector Comments: FS_ID:22069

EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

Crossing Status: Found UCIP Comments: No permit identified for this crossing.

FIELD_STRUCT_DESC: 2.25-inch PVC domestic water service through the levee 5-feet below the crown. Pump and tank on WS slope

with a vent on the LS slope.

FS Date: 8/23/2013

LM Start	4.40	Rating **	М	Issue No.		65	
LM End	4.56	Issue Type +	Ма	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End	
Item	Animal Co	ontrol		37.8945	87 °	37.892493	0
пеш				-121.3292	53 °	-121.328267	0
DWR ID DWR_RD0524_01_s _ 2012_65							
		Action/	Comme	nts			

Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

No Photos

No Photos

Rating ** 4.41 Issue No. LM Start М 162 Issue Type + Location * LS 4.41 En I M End Supplemental GPS Latitude/Longitude Category Start End DWR UCIP Field Study 37.894453° 37.894453 ° Item -121.329232 ° -121.329232 DWR ID DWR_RD0524_01_f _ 2014_162

Action/Comments

Inspector Comments: FS_ID:18320

EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Small leak in pipe on LS slope and pipe slightly

crushed on LS toe.

FIELD_STRUCT_DESC: 9-inch steel stormdrain pipe through the levee 3.0 feet below the crown, pump in drain ditch on the landward side. Siphon breaker on the waterward slope. Originally included in the 1964

O&M manual. FS Date: 8/23/2013 No Photos

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy

M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	4.42	Rating **	М	Issue No.		111	
LM End	4.42	Issue Type +	En	Location *	Location *		
Category	Earthen L	evee	GPS Latitude/Longitude				
Calegory				Start		End	
Item	Encroach	ments		37.8942	58 °	37.894258	0
item			-121.32924	47 °	-121.329247	0	
DWR ID	R ID DWR_RD0524_01_s _ 2012_111						

Action/Comments

Tree or limb

Inspector Comments: Dead tree at landside toe should be removed from levee toe.



Looking west at dead tree at landside toe.

LM Start	4.44	Rating **	М	Issue No.		112
LM End	4.58	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
Calegory			Start		End	
Item	Trim / Thi	n Trees		37.89392	28 °	37.892230 °
пеш				-121.32920)3 °	-121.328187 °
DWR ID	DWR ID DWR_RD0524_01_s _ 2012_112					
		Action/	Comme	nte		

Action/Comments

Trim trees to at least five feet above ground level.

No Photos

LM S	tart	4.53	Rating **	U	Issue No.		79	
LM E	nd	4.54	Issue Type +	Ma	Location *		WS	
Cated	non/	Suppleme	ental		GPS La	titud	e/Longitude	
Cale	JULY				Start		End	
lter	<u>~</u>	DWR Ero	sion Survey		37.8922	30 °	37.892230	•
itei	"				-121.3279	30 °	-121.327930	0
DWR	RID							
			Action/	Comme	nts			

Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: No significant change observed.

08/07/2012: The erosion is located at the inside of a river bend. Site is covered with broken concrete blocks and other debris. [2014 Site ID:RD0524U01RM45.07]



Downstream view of the erosion site.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: C: Corrected U: Unacceptable A/W: Acceptable but Monitor & Maintain D: En: Enforcement

* Issue Type
Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	4.57	Rating **	М	Issue No.		102
LM End	4.57	Issue Type +	En	Location *		WS
Category	evee		GPS La	atitud	e/Longitude	
Category				Start		End
Item	Encroach	ments		37.8923	68 °	37.892368 °
пеш				-121.3282	00°	-121.328200 °
DWR ID	DWR_RD0	524_01_s _ 201	12_102			
		Action/	Comme	nts		
Prunings						

Photo 1 of 1: FA_2014_RD0524_107_102_20141020_00095.	jpg



Looking southeast at dead tree on waterside slope.

LM Start	4.64 Rating ** M			Issue No.		66	
LM End	4.64	Issue Type +	Ма	Location *		LS	
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory						End	
Item	Encroachments			37.891365 °		37.891365 °	
iteiii				-121.3286	33 °	-121.328633 °	
DWR ID	DWR_RD0	524_01_s _ 201	2_66				
		Action/	Comme	nts			
Garbage							
	Januage						



Garbage at landward toe next to ramp at LM 4.64

LM Start	4.65	Rating **	М	Issue No.		63
LM End	4.65	Issue Type +	Ma	Location *	LS	
Category	evee	GPS La	titud	e/Longitude		
Calegory	egory			Start		End
Item	Trim / Thi	37.89128	35 °	37.891285 °		
пеш				-121.32872	28 °	-121.328728 °
DWR ID	DWR_RD0	524_01_s _ 201	12_63			·
Action/Comments						
Trim trees to at least five feet above ground level.						



Looking south at dense trees on landside slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	4.67 Rating ** A/W			Issue No.		113	
LM End	4.67	Issue Type +	Ma	Location *		LS	
Cotogon Earthen Levee				GPS Latitude/Longitude			
Category	egory			Start		End	
Item	Trim / Thi	n Trees		37.8909	73 °	37.890973 °	
item					70°	-121.328970 °	
DWR ID DWR_RD0524_01_s _ 2012_113							
Action/Comments							

Trim trees to at least five feet above ground level.



Looking north at dense trees on landside slope.

No Photos

LM Start	4.71	Rating **	С	Issue No.		90
LM End	4.71	Issue Type + Ma		Location *	WS	
Category				GPS Latitude/Longitude		
Calegory			Start		End	
Item	DWR Ero	sion Survey		37.88980	9°	37.889809 °
пеш				-121.32934	2°	-121.329342 °
DWR ID						·

Action/Comments

Inspector Comments: 6/19/2014: The erosion was repaired.

08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant

change observed

08/23/2011: Cracking erosion along the levee bank. Erosion appears to be caused by river flows. [2014 Site ID:RD0524U01RM45.27]

No Photos

LM Start	4.73	Rating **	М	Issue No.		163
LM End	4.73	3 Issue Type + En		Location *		WS
Category Supplemental			GPS Latitude/Longitude			
Calegory						End
Item	DWR UC	P Field Study		37.8903	13 °	37.890313 °
item				-121.3294	05 °	-121.329405 °
DWR ID	DWR_RD0	524_01_f _ 201	4_163			

Action/Comments

Inspector Comments: FS_ID:18323

EP_NO: 0

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Good candidate for video inspection as brick and

mortar deteriorating inside tunnel.

FIELD_STRUCT_DESC: 22-inch concrete pipe through the levee 12.0 feet below the crown. Pump on pier at WS toe. 16-inch pipe from pump discharges into a concrete riser inside the pumphouse on the WS shoulder. Brick and mortar channel on LS toe. Originally included in

the 1964 O&M manual. FS Date: 8/23/2013

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	4.74	Rating **	A/W	Issue No. 67			
LM End	4.74	Issue Type +	Ma	Location *		LS	
Earthen Levee				GPS La	tituc	le/Longitude	
Calegory	Category					End	
Item	Trim / Thi	n Trees		37.89010	8 °	37.890108	0
пеш	em			-121.32952	23 °	-121.329523	0
DWR ID DWR_RD0524_01_s _ 2012_67							
Action/Comments							

Trim trees to at least five feet above ground level. Inspector Comments: Fig tree at landside toe.

4.94 Rating ** Μ Issue No. 164 LM Start Location * Issue Type + En LS LM End 4.94 GPS Latitude/Longitude Supplemental Category End DWR UCIP Field Study 37.887694° 37.887694° Item -121.331019° -121.331019 ° DWR RD0524 01 f 2014 164 DWR ID

Action/Comments

Inspector Comments: FS_ID:22728

EP_NO: 3817

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Appears abandoned and if so should be done so

properly.

FIELD_STRUCT_DESC: 6-inch steel pipe through the levee 3.0 feet below the crown, pump 120-feet off the LS toe. Siphon breaker in 24-inch CMP on the waterward shoulder (Permit No. 3817) Originally

included in the 1964 O&M manual.

FS Date: 8/23/2013

LM Start	4.98	Rating **	М	Issue No.		84	
LM End	4.98	Issue Type +	Ma	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End	
Item	Trim / Thi	n Trees		37.88727	77 °	37.887277	0
пеш				-121.33160)9 °	-121.331609	0
DWR ID	DWR_RD0	524_01_s _ 201	2_84				

Action/Comments

Trim trees to at least five feet above ground level.

No Photos

No Photos

No Photos

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	5.01	Rating **	М	Issue No.	114		
LM End	5.03	Issue Type +	Ma	Location *	LS		
Earthen Levee			GPS Latitude/Longitude				
Category		Start		End			
Item	Vegetatio	n		37.88690	7 °	37.886673 °	
пеш			-121.33186	2 °	-121.331965 °		
DWR ID DWR_RD0524_01_s _ 2012_114							
Action/Comments							

No Photos

Elderberries are blocking visibility and flood fight capability.

LM Start	5.10	Rating **	М	Issue No.		71	
LM End	5.12	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End	
Item	Trim / Thin Trees			37.8856	ı3°	37.885286 °	
пеш				-121.33213	39 °	-121.332167 °	
DWR ID DWR_RD0524_01_s _ 2012_71							
		Action/	Comme	nts			

Trim trees to at least five feet above ground level.

No Photos

LM Start	5.11	Rating **	U	Issue No.		68		
LM End	5.11	Issue Type +	Ma	Location *	LS			
Category Earthen Levee				GPS Latitude/Longitude				
Category			Start		End			
Itom	Trim / Thi	n Trees		37.88540	00°	37.885400	0	
пеш	Item				3°	-121.332153	0	
DWR ID DWR_RD0524_01_s _ 2012_68								
		Action/	Comme	nts				

Trim trees over roadway to at least 12 feet above ground level.



Looking south at overhanging trees.

** Rating
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable
N : Not Inspected/Rated
M : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

** Rating
A : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	5.17	Rating **	M	Issue No.		188		
LM End	5.17	Issue Type +	Ма	Location *		LS		
Catagory	Category Earthen Levee			GPS Latitude/Longitude				
Category				Start		End		
Item	Trim / Thi	n Trees		37.8846	27 °	37.884627	0	
пеш				-121.3321	72 °	-121.332172	0	
DWR ID	DWR_RD0	524_01_s _ 201	4_188					
		Action/	Comme	nts				

Trim trees to at least five feet above ground level.

No Photos

LM Start	5.20	Rating **	A/W	Issue No.		72		
LM End	5.20	Issue Type +	Ma	Location *	LS			
Category Earthen Levee				GPS Latitude/Longitude				
				Start		End		
Item	Trim / Thi	n Trees		37.8840	75 °	37.884075	0	
item				-121.3321	18 °	-121.332118	0	
DWR ID DWR_RD0524_01_s _ 2012_72								
		Action/	Comme	nts				

Trim trees over roadway to at least 12 feet above ground level.

No Photos

LM Start	5.24	Rating **	М	Issue No.		115	
LM End	5.24	Issue Type +	Ма	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Slope Sta	bility		37.88358	7 °	37.883587	0
пеш				-121.33210	0 °	-121.332100	0
DWR ID	DWR_RD0	524_01_s _ 201	2_115				

Action/Comments

Repair the levee slope damaged by vehicle traffic and prevent access where possible.

Inspector Comments: Vehicle traffic created a ramp on landward slope.



Looking northwest at slope damage on landward slope.

Location + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence LS : Land Side N/A: Not Applicable A : Acceptable M : Minimally Acceptable N : Not Inspected/Rated WS : Water Side C : Corrected A/W : Acceptable but Monitor & Maintain U : Unacceptable En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	5.26	Rating **	М	Issue No.		116	
LM End	5.26	Issue Type +	Ma	Location *	WS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory	Category					End	
ltom	Encroach	ments		37.883170) °	37.883170	0
пеш	Item				, 0	-121.332227	0
DWR ID	DWR ID DWR_RD0524_01_s _ 2012_116						
		Action/	Comme	nte			

Tree or limb

Inspector Comments: Dead tree limbs on waterside slope.

LM Start	5.32	Rating **	М	Issue No.		85	
LM End	5.38	Issue Type +	Ма	Location *	LS		
Category	evee		GPS Latitude/Longitude				
Category				Start		End	
Item	Trim / Thin Trees				77 °	37.881498 °	
пеш				-121.3325	98 °	-121.332800 °	
DWR ID DWR_RD0524_01_s _ 2012_85							
Action/Comments							

Trim trees to at least five feet above ground level.

LM Start	5.43	Rating **	М	Issue No.		932			
LM End	5.46	Issue Type +	Ma	Location *		LS			
Category	Earthen L	evee		GPS Lat	itud	e/Longitude			
Calegory						End			
Trim / Thin Trees				37.88094	5 °	37.880522	0		
пеш				-121.33283	7 °	-121.332918	0		
DWR ID DWR_RD0524_01_s _ 2012_932									
	Action/Comments								

Trim trees to at least five feet above ground level.

No Photos

No Photos

No Photos

* Location LS : Land Side N/A: Not Applicable WS : Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W: Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	5.43	Rating **	U	Issue No.		125			
LM End	5.43	Issue Type +	Ma	Location *		WS			
Catagony	Category				GPS Latitude/Longitude				
Calegory	Category					End			
Item	DWR Ero	sion Survey		37.8803	20 °	37.880320°			
item				-121.33320	66 °	-121.333266 °			
DWR ID						·			

Action/Comments

Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: The erosion seems to be getting worse. More material sloughing visible.

08/07/2012: The erosion is underneath an irrigation pipe. The likely cause of the erosion is the pipe leakage. [2014 Site ID:RD0524U01RM45.97]



Close view of the erosion and the pipe.

LM Start	5.44	Rating **	М	Issue No.		178
LM End	5.44	Issue Type +	Ma	Location *		N/A
Category	Earthen Levee			GPS Latitude/Longitude		
Calegory				Start		End
Item	Encroach	ments		37.88080	06 °	37.880806 °
пеш	item			-121.33283	33 °	-121.332833 °
DWR ID DWR_RD0524_01_f _ 2014_178						
		A - 1' 1	<u> </u>	-1-		

Action/Comments

Tree or limb

Inspector Comments: Downed tree on landward toe.



Looking south at downed tree on landward slope.

LM Start	5.46	Rating **	U	Issue No.		165		
LM End	5.46	Issue Type +	En	En Location *		N/A		
Supplemental				GPS Latitude/Longitude				
Calegory	Category				Start End			
Item	DWR UC	DWR UCIP Field Study				37.880584	c	
пеш				-121.33290	1 °	-121.332901	o	
DWR ID	DWR_RD0	524_01_f _ 201	4_165					

Action/Comments

Inspector Comments: FS_ID:18345

EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: flap gate damage and does not work at WS toe. Large hole in pipe at WS toe. Pipe appears abandoned and should be

done so properly.

FIELD_STRUCT_DESC: 1 of 2: 12-inch pipe through the levee 6.0-feet below the crown, pump missing from the landward side. Flap gate on the waterward end. Originally included in the 1964 O&M manual.

FS Date: 8/23/2013

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	5.46	Rating **	A/W	Issue No.	931		
LM End	5.46	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory	ory			Start		End	
Item	Animal Co	ontrol		37.8805	75 °	37.880575	0
item				-121.3328	90 °	-121.332890	0
DWR ID	DWR ID DWR_RD0524_01_s _ 2012_931						
Action/Comments							

Exterminate rodents and backfill and compact or grout burrows. Inspector Comments: LMA grouted rodent holes.

LM Start	5.46	Rating **	A/W	Issue No.	931 (cont)	
LMEssel	E 46	Issue Type +	1.40	Location *	1.0	



Looking north at typical view of grouted rodent holes on landward shoulder and slope.

Photo 2 of 2: FA_2014_RD0524_107_931_20141023_00214.jpg



Looking north at typical view of grouted rodent holes on waterward slope.

LM Start	5.47	Rating **	М	Issue No.	166		
LM End	5.47	Issue Type +	En	Location *	LS		
Category	Category Supplemental			GPS Lati	tud	e/Longitude	
Category				Start		End	
Itom	DWR UC	P Field Study	,	37.880358	°	37.880358 °	
Item				-121.332972	0	-121.332972 °	
DWR ID	DWR_RD0524_01_f _ 2014_166						
	Action/Comments						

Inspector Comments: FS_ID:18348

EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Recent work being done on WS slope. Pipe may still

be in use.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	5.47	Rating **	М	Issue No.		118		
LM End	5.47	Issue Type +	Ma	Location *	LS			
Earthen Levee				GPS La	atitud	e/Longitude		
Category				Start End		End		
Item	Slope Stability			37.8803	23 °	37.880323 °		
itein				-121.3329	68 °	-121.332968 °		
DWR ID	DWR ID DWR_RD0524_01_s _ 2012_118							
Action/Comments								
Repair slope instability.								

Inspector Comments: Slope damage caused by human activity.

	3		
		To Auto	
			4 2
42			
		7	A Company
	2/19	n	
	7	East and	
	A Company		
		The second	20 7

Photo 1 of 3: FA_2014_RD0524_107_118_20141020_00108.jpg

Looking west at slope damage on landside slope.

LM Start	5.47	Rating **	М	Issue No.	118 (cont)
LM End	5.47	Issue Type +	Ma	Location *	LS

Photo 2 of 3: FA_2014_RD0524_107_118_20141020_00109.jpg



Looking southeast at damaged slope.

LM Start	5.47	Rating **	М	Issue No.	118 (cont)
LM End	5.47	Issue Type +	Ma	Location *	LS



Looking east at slope caving on landside slope.

* Location + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence LS : Land Side N/A: Not Applicable A : Acceptable M : Minimally Acceptable N : Not Inspected/Rated WS : Water Side C : Corrected A/W : Acceptable but Monitor & Maintain U : Unacceptable En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	5.48	Rating **	М	Issue No.		73	
LM End	5.48	Issue Type +	Ма	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Trim / Thi	n Trees		37.88008	5°	37.880085	0
пеш			-121.33304	5°	-121.333045	0	
DWR ID	DWR ID DWR_RD0524_01_s _ 2012_73						
	Action/Comments						

No Photos

Trim trees to at least five feet above ground level.

LM Start	5.50	Rating **	М	Issue No.		189	
LM End	5.50	Issue Type +	Ма	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End	
Item	Encroachments			37.87999	8°	37.879998	0
item				-121.33307	'9 °	-121.333079	0
DWR ID DWR_RD0524_01_s _ 2014_189							
Action/Comments							

No Photos

Prunings Inspector Comments: Prunings on landward shoulder should be removed.

LM Start	5.57	Rating **	М	Issue No.		96	
LM End	5.57	Issue Type +	Ма	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End	
Item	Trim / Thi	n Trees		37.87891	8 °	37.878918 °	
пеш		-121.33314	8 °	-121.333148 °			
DWR ID DWR_RD0524_01_s _ 2012_96							
	Action/Comments						

Trim trees to at least five feet above ground level.

No Photos

* Location

LS: Land Side N/A: Not Applicable

WS : Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	5.65	Rating **	С	Issue No.		127	
LM End	5.66	Issue Type +	Ма	Location *		WS	
Supplemental				GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR Erosion Survey				30 °	37.877880	0
пеш				-121.33255	50 °	-121.332550	0
DWR ID							

No Photos

Action/Comments

Inspector Comments: 6/19/2014: The erosion was repaired. 08/13/2013: The boat survey found no significant change at this site, except slight animal activity was visible at the site.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: No significant change observed on site.

09/07/2010: No significant change observed on site. Erosion site is located beneath Howard Road Bridge. Majority of the existing rip rap has slipped, dragging away levee materials and exposing the underlying soft soil.

08/06/2010: Recommend for annual assessment and monitoring during flood events, per CLRO.

09/30/2009: No major change observed since the last visit; upper portion of existing revetment has slipped, exposing the degrading bank; note that site # is the same as RM46.30, LM5.69 found in the CLRO CES Evaluation 2008 Report; site was previously rated "M".

11/04/2008: Previously repaired using rock revetment; upper portion of the revetment is sliding, causing deformation on the levee slope; site is upstream of Howards Road Bridge. [2014 Site ID:RD0524U01RM46.12]

LM Start	5.69	Rating **	М	Issue No.		117	
LM End	5.69	Issue Type +	Ма	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Trim / Thi	n Trees		37.877272	0	37.877272	0
пеш			-121.332400	°	-121.332400	0	
DWR ID	DWR ID DWR_RD0524_01_f _ 2013_117						

Action/Comments Trim trees to at least five feet above ground level. No Photos

Location LS : Land Side N/A: Not Applicable WS : Water Side

A : Acceptable
M : Minimally A : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

A/W: Acceptable but Monitor & Maintain

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start 5.79 Rating ** Μ Issue No. 167 Issue Type + Location * LS LM End 5.79 En Supplemental GPS Latitude/Longitude Category End Start DWR UCIP Field Study 37.876001° 37.876001 ° Item -121.332725 ° -121.332725 ° DWR ID DWR_RD0524_01_f _ 2014_167 Action/Comments

Inspector Comments: FS_ID:40793

EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: Appears abandoned and if so should be done so

properly. No permit identified for this crossing.

FIELD_STRUCT_DESC: 1-inch steel waterline through the levee 1.0-

foot below the crown. Pipe visible only on LS shoulder.

FS Date: 8/23/2013

LM Start	5.79	Rating **	М	Issue No.		168	
LM End	5.79	Issue Type +	En	Location *	LS		
Category			GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UCIP Field Study			37.8760	01 °	37.876001 °	
пеш				-121.3327	25 °	-121.332725 °	
DWR ID	DWR ID DWR_RD0524_01_f _ 2014_168						
		A .: /	_				

Action/Comments

Inspector Comments: FS_ID:18364

EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Abandoned and should be done so properly. FIELD_STRUCT_DESC: 2.25-inch steel conduit for a 1-inch plastic electrical conduit through the levee 0.25-feet below the crown. Lines

exposed on both slopes. FS Date: 8/23/2013

LM Start	5.84	Rating **	М	Issue No.		267
LM End	5.84	Issue Type +	Ма	Location *	LS	
Category	evee		GPS Latitude/Longitude			
Calegory				Start		End
Item	Encroachments			37.87532	8°	37.875328 °
-121.3						-121.333050 °
DWR ID DWR_RD0524_01_s _ 2012_267						
Action/Comments						

Prunings

Inspector Comments: Prunings at landside toe should be burned or removed.

No Photos

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	5.86	Rating **	U	Issue No.		128	
LM End	5.86	Issue Type +	Ма	Location *		WS	
Category	Suppleme		GPS Latitude/Longitude				
Calegory			Start		End		
Item	DWR Ero	sion Survey		37.8743	70 °	37.874370°	
item			-121.3328	50 °	-121.332850 °		
DWR ID						·	

Action/Comments

Inspector Comments: 06/19/2014: No significant change observed. 08/13/2013: No significant change observed.

08/07/2012: The erosion is near a water-intake structure. Pipe leakage likely caused the erosion. [2014 Site ID:RD0524U01RM46.39]



Front view of the site.

LM Start	5.86	Rating **	A/W	Issue No.		69
LM End	5.86	Issue Type +	Ма	Location *	LS	
Catagory	Earthen Levee			GPS Latitude/Longitude		
Calegory	Category		Start		End	
Item	Animal Co	ontrol		37.87729	98 °	37.875073 °
item				-121.33234	ıa °	-121.333168 °
DWR ID	DWR_RD0	524_01_s _ 201	2_69			
		A otion /	Commo	oto		

Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comments: District has grouted rodent holes.

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	5.87	Rating **	М	Issue No.	169		
LM End	5.87	Issue Type +	En	Location *	LS		
Category	Suppleme	ıpplemental			GPS Latitude/Longitude		
Category				Start		End	
Item	DWR UC	IP Field Study		37.87497	2°	37.874972	0
пеш			-		6°	-121.333246	0
DWR ID	DWR_RD0	524_01_f _ 201	4_169				
		A ation /	Camma	nto.			

Action/Comments

Inspector Comments: FS_ID:18369

EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Apparent leak on WS shoulder at concrete riser. Erosion under pipe. This may have been fixed when the pipe was sleeved with a PVC liner.

FIELD_STRUCT_DESC: 10-inch steel storm drain pipe through the levee 5.0 feet below the crown. Pump on the landward side. Siphon breaker in a 36-inch concrete riser on the waterward shoulder. Power pole at the landward toe. PVC liner sleeved inside steel pipe.

Originally included in the 1964 O&M manual.

FS Date: 8/23/2013

LM Start	5.88	Rating **	М	Issue No.		170	
LM End	5.88	Issue Type +	En	Location *		LS	
Category	Suppleme	ental	GPS La	atitud	le/Longitude		
Category				Start		End	
Item	DWR UC	IP Field Study	,	37.8748	29 °	37.874829	0
пеш				-121.3332	65 °	-121.333265	0
DWR ID	DWR_RD0	524_01_f _ 201	4_170				

Action/Comments

Inspector Comments: FS_ID:18705

EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: Need to verify gasline exists and if so improve

FIELD_STRUCT_DESC: Gasline marker sign on WS shoulder.

FS Date: 8/23/2013

No Photos

No Photos

+ Issue Type En: Enforcement

A/W: Acceptable but Monitor & Maintain

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	5.92	Rating **	М	Issue No.	75		
LM End	5.94	Issue Type +	Ma	Location *		WS	
Category	Earthen L	rthen Levee			GPS Latitude/Longitude		
Calegory				Start		End	
Item	Animal Co	ontrol		37.8742	40 °	37.874002 °	
item				-121.3331	87 °	-121.333027 °	
DWR ID	DWR_RD0	524_01_s _ 201	12_75				

Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comments: District has grouted rodent holes, but other rodent holes have appeared.

LM Start	5.92	Rating **	М	Issue No.	75 (cont)
LM End	5.94	Issue Type +	Ma	Location *	WS

Photo 1 of 2: FA_2014_RD0524_107_75_20141020_00077.jpg



Looking southwest at typical rodent holes on waterward slope.

Photo 2 of 2: FA_2014_RD0524_107_75_20141023_00217.jpg



Looking typical view of several rodent holes on landward slope and toe.

LM Start	5.92	Rating **	М	Issue No.		74				
LM End	5.92	Issue Type +	Ма	Location *		WS				
Catagory	Earthen Levee			Category Earthen Levee			GPS La	atitud	le/Longitude	
Calegory						End				
Item	Erosion /	Bank Caving		37.8742	40 °	37.874165	٥			
item				-121.3331	85 °	-121.333155	٥			
DWR ID	DWR_RD0524_01_s _ 2012_74									
	Action/Comments									

Note and monitor erosion site.

Inspector Comments: Erosion on landward slope around intake pipe.

Photo 1 of 3: FA_2014_RD0524_107_74_20141020_00075.jpg



Looking southeast at erosion around pipe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	5.92	Rating **	М	Issue No.		74 (cont)	
LM End	5.92	Issue Type +	Ma	Location * WS		WS	
Catagony	Earthen Levee			GPS La	titud	e/Longitude	
Calegory	Category			Start		End	
Item	Erosion /	Erosion / Bank Caving			° O	37.874165	0
item				-121.33318	85 °	-121.333155	0
DWR ID	DWR_RD0524_01_s _ 2012_74						

Action/Comments

Note and monitor erosion site.

Inspector Comments: Erosion on landward slope around intake pipe.

LM Start	5.92	Rating **	М	Issue No.	74 (cont)
LM End	5.92	Issue Type +	Ma	Location *	WS

Photo 2 of 3: FA_2014_RD0524_107_74_20141023_00216.jpg



Looking west at erosion around intake pipe on landward slope.

Photo 3 of 3: FA_2014_RD0524_107_74_20141020_00076.jpg



Erosion at waterward toe and around irrigation pipe at LM 5.92

Photo 1 of 1: FA_2014_RD0524_107_190_20141020_00141.jpg

LM Start	5.92	Rating **	A/W	Issue No.		190	
LM End	5.92	Issue Type +	Ма	Location *	n* WS		
Catagory Earthen Levee			GPS Latitude/Longitude				
Category			Start		End		
Itom	ltem Encroachments			37.8741	97 °	37.874197 °	
item				-121.3332	08 °	-121.333208 °	
DWR ID	DWR_RD0524_01_s _ 2014_190						
Action/Comments							

Inspector Comments: Landowner is replacing pump and left old pipe on waterward shoulder.

Looking southeast at old pump shaft on waterward shoulder.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

5.92	Rating **	М	Issue No.		171	
5.92	Issue Type +	En	Location *	WS		
Category				itud	e/Longitude	
			Start		End	
DWR UC	P Field Study		37.87419	4 °	37.874194	۰
			-121.33318	2 °	-121.333182	0
DWR_RD0	524_01_f _ 201	4_171				
	5.92 Suppleme	5.92 Issue Type + Supplemental DWR UCIP Field Study	5.92 Issue Type + En	5.92 Issue Type + En Location * Supplemental GPS Lati Start Start DWR UCIP Field Study 37.874194 -121.333182	5.92 Issue Type + En Location * Supplemental GPS Latitud Start Start DWR UCIP Field Study 37.874194 ° -121.333182 °	5.92 Issue Type + En Location * WS Supplemental GPS Latitude/Longitude Start End DWR UCIP Field Study 37.874194 ° 37.874194 -121.333182 ° -121.333182

Action/Comments

Inspector Comments: FS_ID:18379

EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Heavy erosion around pipe upstream of standpipe on LS slope. Verify pipe is not leaking and repair erosion on LS slope. FIELD_STRUCT_DESC: 12-inch steel irrigation pipe through the levee 10.0 feet below the crown. Slant pump on pier at WS toe. 10-inch steel standpipe on LS slope. 42-inch concrete standpipe on LS slope. Filter plant, and power pole on LS toe. 1.5-inch galvanized iron electrical conduit at same location. Originally included in the 1964 O&M manual.

FS Date: 8/23/2013

Photo 1 of 2 : FA_2014_RD0524_107_119_20141020_00111.jpg	į

No Photos



Looking west at unauthorized ramp and landside slope damage.

5.93	Rating **	U	Issue No.	119				
5.93	Issue Type +	Ma	Location *	LS				
Category Earthen Levee				GPS Latitude/Longitude				
		Start		End				
Slope Stability			37.87389	93 °	37.873893 °			
			-121.33297	78 °	-121.332978 °			
DWR_RD0524_01_s _ 2012_119								
	5.93 Earthen L Slope Sta	Earthen Levee Slope Stability	5.93 Issue Type + Ma Earthen Levee Slope Stability	5.93 Issue Type + Ma Location * Earthen Levee GPS La Start Start Slope Stability 37.8738 -121.3329	5.93 Issue Type + Ma Location * Earthen Levee GPS Latitud Start Start Slope Stability 37.873893 ° -121.332978 °			

Action/Comments

Repair the levee slope damaged by vehicle traffic and prevent access where possible.

Inspector Comments: Landowner is using damaged area as a ramp.

* Location

LS: Land Side N/A: Not Applicable
WS: Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected + Issue Type

Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	5.93	Rating **	U	Issue No.	119 (cont)			
LM End	5.93	Issue Type +	Ma	Location *	LS			
Catagoria Earthen Levee				GPS La	atitud	le/Longitude		
Category				Start		End		
Item	Slope Sta	bility		37.8738	93 °	37.873893	•	
пеш				-121.3329	78 °	-121.332978	0	
DWR ID	DWR_RD0524_01_s _ 2012_119							
	Action/Comments							

Action/Comments Repair the levee slope damaged by vehicle traffic and prevent access

Inspector Comments: Landowner is using damaged area as a ramp.



Looking southwest at damaged slope and ramp on landside slope.

LM Start	5.97	Rating **	М	Issue No.		86		
LM End	5.97	Issue Type +	Ma	Location *	LS			
Earthen Levee			GPS La	atitud	le/Longitude			
Category			Start		End			
Item	Trim / Thi	n Trees		37.8736	78 °	37.873678 °		
пеш				-121.3325	50 °	-121.332550 °		
DWR ID	DWR_RD0524_01_s _ 2012_86							
	Action/Comments							

Trim trees to at least five feet above ground level.

No Photos

LM Start	5.99	Rating **	М	Issue No.	87					
LM End	6.00	Issue Type +	En	Location *	LS					
Category Earthen Levee				GPS Latitude/Longitude						
Calegory		Start		End						
Encroachments				37.8735	45 °	37.873445	0			
Item				-121.3323	08 °	-121.332127	0			
DWR ID	DWR_RD0	524_01_s _ 201								
Action/Comments										

Fence

where possible.

No Photos

* Location N/A: Not Applicable LS : Land Side WS : Water Side U : Unacceptable

A : Acceptable M : Minimally Acceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	5.99	Rating **	U	Issue No.		88	
LM End	6.00	Issue Type +	En	Location *		LS	
Category Earthen Levee				GPS La	atitud	e/Longitude	
				Start		End	
Item	Vegetatio	n		37.8735	43 °	37.873445	0
пеш				-121.3323	08 °	-121.332127	0
DWR ID	DWR_RD0	524_01_s _ 201	2_88				
		Action/	Comme	nts			
Landscaping Inspector Comments: Cactus							



Looking southeast at fence and cactus on landside slope and toe.

LM Start	LM Start 6.01 Rating ** M Issue No. 120								
LM End	6.01	Issue Type +	Ma	Location *	LS				
Category Earthen Levee GPS Latitude/Longitude									
Start End									
Item	Trim / Thin Trees 37.873347 ° 37.873347								
-121.332028 ° -121.332028 °									
DWR ID DWR_RD0524_01_s _ 2012_120									
		Action/	Comme	nts					

Trim trees to at least five feet above ground level.

No Photos

LM Start	6.02	Rating **	М	Issue No.		81	
LM End	6.02	Issue Type +	Ma	Location *	LS		
Catagory	Category Earthen Levee GPS Latitude/Longitude						
Start End							
Item	Trim / Thi	n Trees		37.87330	00°	37.873300	٥
пеш				-121.33192	28 °	-121.331928	0
DWR ID DWR_RD0524_01_s _ 2012_81							
	Action/Comments						

Trim trees to at least five feet above ground level.

No Photos

* Location

LS: Land Side N/A: Not Applicable

WS: Water Side

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M: Minimally Acceptable
U: Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma: Maintenance Deficiancy

Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	6.05	Rating **	М	Issue No.		933		
LM End	6.05	Issue Type +	Ma	Location *	LS			
Catagony	Category Earthen Levee GPS Latitude/Longitude							
Start End								
ltom	Slope Sta	bility		37.8730	47 °	37.873047 °		
пеш	ltem -121.331408 ° -121.331408 °							
DWR ID DWR_RD0524_01_s _ 2012_933								
		Action/	Comme	nte				

Action/Comments

Repair the levee slope damaged by foot traffic and prevent access where possible.

Inspector Comments: Landowner cut steps into landside slope.



Looking north at steps cut into landward slope.

LM Start	6.08	Rating **	М	Issue No.		191		
LM End	6.08	Issue Type +	Ma	Location *	LS			
Category Earthen Levee GPS Latitude/Longitude								
Calegory	Start End							
Vegetation 37.8						37.872844 °		
пеш	-121.331070 ° -121.331070 °							
DWR ID DWR_RD0524_01_s _ 2014_191								
		Action/	Comme	nts				

Remove the wild growth other than native grasses from the levee slopes.

Inspector Comments: Cactus at landward toe.

No Photos

LM Start	6.21	Rating **	М	Issue No.		172		
LM End	6.21	Issue Type +	En	Location *	LS		LS	
Category			GPS Latitude/Longitude					
Calegory				Start		End		
Item	DWR UC	IP Field Study	,	37.8711	38 °	37.871138	0	
пеш				-121.3301	46 °	-121.330146	0	
DWR ID	DWR_RD0	524_01_f _ 201	4_172					

Action/Comments

Inspector Comments: FS_ID:18392

EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe and pump abandoned and should be done so

FIELD_STRUCT_DESC: *ABANDONED*10-inch pipe through levee 12.0 feet below crown, pump on the waterward slope. Originally

included in the 1964 O&M manual.

FS Date: 8/23/2013

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	6.21	Rating **	М	Issue No.		268		
LM End	6.21 Issue Type + Ma		Location *		WS			
Category	Earthen L	evee		GPS Latitude/Longitude				
Start End								
Itom	Encroach	ments		37.8711	37 °	37.871137	0	
item	-121.330138 ° -121.330138 °							
DWR ID DWR_RD0524_01_s _ 2012_268								
		Action/	Comme	nte				

Pipe

Inspector Comments: Open abandoned 10" pipe on waterside slope below flood elevation. Pipe should be removed or properly abandoned.



Looking southeast at abandoned pipe on waterside slope.

LM Start	6.21	Rating **	М	Issue No.		173	
LM End	6.21	Issue Type +	En	Location *		WS	
Category	ental	GPS Latitude/Longitude					
Category				Start		End	
Item	DWR UCIP Field Study			37.87111	8 °	37.871118 °	
пеш				-121.33013	7 °	-121.330137 °	
DWR ID DWR_RD0524_01_f _ 2014_173							

Action/Comments

Inspector Comments: FS_ID:22073 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Abandoned and should be done so properly. FIELD_STRUCT_DESC: *ABANDONED* 1.75-inch galvanized iron electrical conduit through the levee 1-foot below the crown. Power pole

on LS toe.

FS Date: 8/23/2013

No Photos

LM Start	6.23	Rating **	М	Issue No.	98		
LM End	6.23	Issue Type +	Ma	Location *	LS		
Category	Earthen Levee			GPS Latitude/Longitude			
				Start		End	
Item	Trim / Thin Trees			37.870842 °		37.870842 °	
				-121.3300	° 00	-121.330000 °	
DWR ID	DWR_RD0524_01_s _ 2012_98						
Action/Comments							

Trim trees to at least five feet above ground level.

No Photos

* Location A : Acceptable M : Minimally A LS : Land Side N/A: Not Applicable : Minimally Acceptable WS : Water Side U : Unacceptable A/W: Acceptable but Monitor & Maintain

N : Not Inspected/Rated C : Corrected

+ Issue Type

Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	6.23	Rating **	A/W	Issue No.	97		
LM End	6.23	Issue Type +	Ma	Location *	LS		
Category	Earthen Levee			GPS Latitude/Longitude			
				Start		End	
Item	Vegetation			37.8708	40 °	37.870840	0
				-121.329993 °		-121.329993	0
DWR ID	DWR_RD0524_01_s _ 2012_97						
Action/Comments							
Remove th slopes.	ne wild gro	wth other thar	native (grasses froi	m th	e levee	

No Photos

* Location

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U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

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